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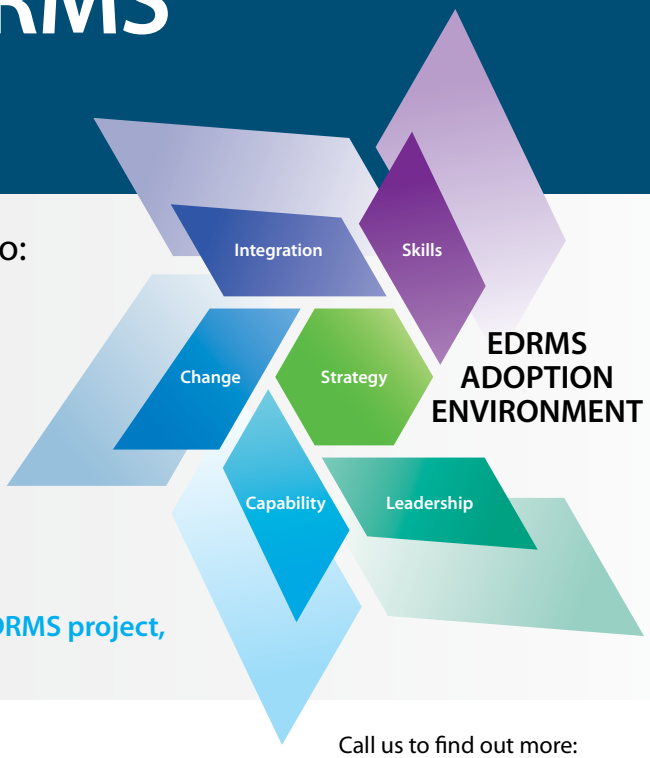


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**RIM PROFESSIONALS AUSTRALASIA WEBSITE**
http://www.rimpa.com.au


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Debbie Prout, Chairman of the Board, RIM Professionals Australasia

# Planning for 2014 – what's next?

I can't believe another year has come and gone. I hope you all had a safe and happy Christmas and a wonderful start to 2014. For me it has been a time to take some well-earned rest and relaxation with my long suffering husband and daughter. Where would we be without the support that our families give us? Christmas is a good time to reflect and acknowledge how they help us to get through each challenging year.

2013 was certainly a momentous year for me especially with taking on the challenging role of Chairman of the Board. I have also taken the opportunity to consider my goals for the coming year and what I hope to achieve.

As I continue to help my clients with their records management issues, it seems as if they get more complex each year. How easy things were in the paper world. Security was as simple as keeping documents in locked cabinets and the volume of documents was a fraction of what we have to contend with today.

The theme of this month's *iQ* certainly says it all: 'Big data and the cloud'. I personally wonder where it is all going to end and keep telling people that it might be time for me to retire, but somehow we find the energy to keep going and to try and find answers to the problems as the arise. Answers to the big questions can only be found if we continue to work together and explore all options. Is it as simple as continuing to apply the old tried and true methods or do we try something different?

*Answers to the big questions can only be found if we continue to work together and explore all options*

As this is a new year and the Board will be reassessing the strategic plan at our next meeting in March, I would like to ask you the members what you think; below are the strategic issues identified in the strategic plan. Are they still relevant or do you want us to go in a different direction? Remember this is your Association and we need to know that we are meeting your expectations. Any feedback in relation to the strategic issues or any other projects you would like the Association to look at can be directed to kate.walker@rimpa.com.au. A full copy of the Strategic Plan is available on the website http://www.rimpa.com.au/.

## PROFESSIONAL DEVELOPMENT

As we plan for 2014, I remind you all to keep the date clear for inForum, to be held in Adelaide on 7-10 September (see page 44). The theme this year is 'What's next?' – very topical considering the theme of this issue of *iQ*. A debate will be held on the Tuesday afternoon, the topic of which is 'Will the paperless office ever happen?' This should be entertaining and thought provoking; I am looking forward to arguing on the side for the argument and welcome any input from any likeminded members who think the paperless office is a possibility.

As always branches will continue to provide workshops and seminars throughout 2014 and I once again encourage members to liaise with their branches and assist in providing ideas on what they want to see at events.

I would like to take this opportunity to wish you all the best for 2014 and remember keep on fighting the good fight – although rarely acknowledged, records managers are the lynchpin for organisations… what we do is important and should not be underestimated. Be proud and passionate and don't be afraid to tell people about the exciting environment we work in.

**Debbie Prout**
Chairman of the Board

**2011 – 2013 STRATEGIC ISSUES**

| Advocacy | Community | Knowledge | Governance |
|---|---|---|---|
| Records and Information Management Professionals Australasia will facilitate effective dialogue amongst members, government, private sectors, legislative bodies and the public, collectively and individually to promote a better environment, expanded influence and a healthy future of the records and information management profession. | Records and Information Management Professionals Australasia will cultivate and maintain relationships to better engage and support our members in strengthening the profession and supporting community expectations. | Records and Information Management Professionals Australasia will facilitate the sharing of knowledge by providing guidance, direction and expertise to enable RIM excellence. Encourage and support professional education and training of members, through development, accreditation and delivery of programs. | Records and Information Management Professionals Australasia will utilise effective management and fiscal responsibility to implement the Company's programs and governance framework to provide transparency and accountability. |

Kate Walker, Chief Executive Officer, RIM Professionals Australasia

# Big data and the cloud

Big data is an inherent feature of the cloud and provides unprecedented opportunities to use both traditional, structured database information and business analytics with social networking, sensor network data, and far less structured multimedia. Big data applications require a data-centric computing architecture, and many solutions include cloud-based application programming interfaces (APIs) to interface with advanced columnar searches, machine learning algorithms, and advanced analytics such as computer vision, video analytics, and visualisation tools.

Big data has come about largely because of advances in mobile devices that now include digital video, photography, audio, and advanced email and text features. Users are collecting data in numbers that were never seen a decade ago; likewise, new applications provide big data server features – natural language translation for phrases spoken or typed into mobile devices.

What distinguishes big data analytics is the breadth of data types processed and the interactive analysis and search tools provided.

'Big data' is broadly defined as the capture, management, and analysis of data that goes beyond typical structured data, which can be queried by relational database management systems — often to unstructured files, digital video, images, sensor data, log files, and really any data not contained in records with distinct searchable fields. In some sense, the unstructured data is the interesting data, but it's difficult to synthesise or draw conclusions from it unless it can be correlated to structured data.

*Interestingly, most data will never be reviewed by a human*

Big data also has new sources, like machine generation, mobile devices (video, photographs, and text messaging), and machine-to-machine, where the Internet of Things reports status for purposes of maintenance planning for fleets of vehicles or aircraft or general telemetry monitoring.

Perhaps the best way to understand big data is to review its history, as *Forbes Magazine* has done (see http://www.forbes.com/sites/gilpress/2013/05/09/a-very-short-history-of-big-data/). The scale of what has been considered big data has of course increased to the current rate of more than 2.5 Exabyte's per day. Interestingly, most data will never be reviewed by a human.

Given this challenge, the only logical way to use this much data is machine-to-machine automation or intelligent query of big data. Furthermore, if this much data is kept over long periods of time, how would anyone even know if some of it had been corrupted?

If companies, governments and organisations carefully collect, analyse, and use big data, the value to the public will be apparent. If big data analytics capabilities are abused, public trust will be lost, and the value will be lost.

The integration of big data analytics with public information (or private, voluntarily provided information trusted to a custodian) can allow for rapid search of large volumes of video, voice, sensor data, and email text to improve public safety for disaster recovery, to prevent terrorist threats, and to understand public concerns. One could almost think of this as feedback compared with the one-way broadcast for emergency warning systems. Of course, concern and a potential dark side exist to big data and video/voice/email analytics if it becomes privacy invasion. Such systems require responsible use, full disclosure, and auditing of data collected in public places and networks.

## WHAT DOES BIG DATA BRING TO THE TABLE?

In this highly hyped relationship (big data and the cloud), big data – in addition to her sex appeal – is the breadwinner, bringing usable information to your organisation, which is what big data is all about.

But before adding big data to your corporate mix, you need to answer these questions:

- How much big data do you really have? Does the volume warrant extending your current infrastructure?
- What is the nature of your data – structured, semi-structured and/or unstructured? Do you currently have the infrastructure and technology to support these different types of data?
- Where is your big data coming from – internal, external and/or open sources? Big data brings with it an abundance of data sources – some new and some old – and these sources are rapidly growing.

Most importantly: Before embarking on any big data initiative, identify the business issue being addressed and the expected value it will bring.

If big data is the sexy breadwinner, then cloud brings a reliable, stable foundation – ie, the infrastructure – to the relationship. Cloud offers multiple infrastructure options:

- **Internal private cloud:** a virtualised, dedicated infrastructure inside your firewall
- **External private cloud:** a shared, but customised infrastructure hosted outside your firewall
- **Public cloud:** a shared infrastructure hosted by a third party
- **Hybrid:** a mixed environment of on-premises, private cloud (internal and external) and public cloud

Cloud is also known for bringing speed to innovation, agility and rapid scalability, and a lower total cost of ownership to its relationships.


## GETTING TO YOUR HAPPILY EVER AFTER

If you've answered all the questions above, and understand what cloud can deliver, you're ready to take the plunge. But like any relationship, there are things you'll need to figure out along the way. Here are seven dynamics you'll need to consider:

**Open source:** At the heart of the big data hype is open source software. The good news is that open source software is free, but it requires a solid understanding of the open source ecosystem, whether it's installed on-premises or in the cloud.

**Data storage and processing:** Big data has many compelling use cases, including the staging, pre-processing, processing, and storing of data short term and long term. Each use case may be best served by different facets of the infrastructure. For example, you can stage and pre-process data in a private internal cloud to keep it close to structured, on-premises data; process structured data in the private cloud; and/or store long-term data in the public cloud.

**Skills:** The new big data technologies require skills you may not have in-house: open source, cloud integration, security and analysis tools, to name a few.

**Support:** With the additional hardware, software and skills required by big data, an organisation needs to decide who is best suited to support this extensive infrastructure.

**Performance:** The closer you keep your data together, the better the performance will be. If your data is stored across the country or on another continent, you will need to consider the network traffic to upload and access the data; the results could be brutal. The volume of big data alone could bring your infrastructure to its knees and dissatisfaction to your internal and external customers.

**Integration:** In the early stages of your big data journey, you will most likely work with the data in a standalone environment, whether it be on-premises or in the cloud. Long term, however, you will want to integrate big data with existing applications, systems and processes. The integration of big data across internal and external systems, in and outside the cloud, is forcing companies to re-examine their existing skills.

**Privacy:** With big data, organisations can easily tap into new (and old) data sources – such as social, open and machine data – and combine it with existing operational and analytical data like never before. This can lead to fascinating and innovative insights about customers. But therein lies the challenge: These new insights may infringe on a customer's privacy rights. Take heed of this important topic as it evolves.

One final tip. Build a solid foundation by addressing each of these considerations, and you'll see that the relationship between cloud and big data is truly a match made in heaven.

**Kate Walker**
FRIM MAICD AMIM, MBA, BSC (BAdm), AdvDipBus (Rkg), DipBus (Adm)

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# WORLDWIDE NEWS

## Poor record keeping, so fuel tax credit claims refused

**A trustee of a family trust that operated a construction and earthmoving equipment business has been unsuccessful before the Australian Administrative Appeals Tribunal *(The taxpayer and the Commissioner of Taxation) 2013 AATA 448 (June 2013)* in a claim for fuel tax credits.**

Following an audit of the business in 2010, the Commissioner refused the credits, citing that records maintained by the taxpayer did not accurately describe the amount of fuel acquired or used, or adequately describe the purpose for which the fuel was used.

The taxpayer acknowledged that there were problems with its record keeping but claimed the difficulties were caused by employee delinquency. Further, it said its true entitlements were actually much greater than the amount claimed.

However, the AAT was not satisfied with estimates provided by the taxpayer. It was also critical of the taxpayer's records, saying they "were a mess". The AAT affirmed the Commissioner's decision, as well as the imposition of penalties at 25%.

## Government digital archives $10 million blowout


Grant Robertson

**The New Zealand National Government's flagship program to implement a government-wide digital archive system is in chaos, with a projected $10 million budget blowout and a delay of up to five years, papers obtained by Labour's Associate Arts, Culture and Heritage spokesperson Grant Robertson reveal.**

"With some fanfare, the Government allocated $12 million in 2010 for this program," said Mr Robertson. "Three years on very little has been achieved, the cost has almost doubled and the program is in crisis.

"The project manager is forecasting a 'financial blowout' of between $8.3 and $10.8 million. This is costing the taxpayers of New Zealand dearly.

"Department of Internal Affairs officials confirmed at a select committee on 11 December 2013 that Internal Affairs Minister Chris Tremain has been briefed throughout the program. Why did he allow the program to continue with such a lack of focus and budgetary discipline?" asks Mr Robertson.

"A review of the program indicates failure on almost every level. A large number of staff have resigned and morale is low because of 'uncertainty' over its future. There has been 'poor' communication, 'unsatisfactory' documentation, 'loosely directed' resources and contractors who have no 'formal reporting' process.

"It is a shambles and there is no new archive system in sight.

"The understanding of key issues among the leadership team at the Department of Internal Affairs is described as 'low' and there is a 'lack of organisational support or understanding of the importance of the program'.

"This is exactly the warning that was sounded when the National Government decided to merge Archives New Zealand into Internal Affairs. The important constitutional and archival role has been compromised by a merger that was never properly justified."

Source: Labour Party – Press Release/Statement

## Librarians reject second association name change

**British librarians have rejected a determined bid by their professional body, CILIP, to abandon its name in favour of one with a similarly improbable acronym, ILPUK[1].**

The Chartered Institute of Library and Information Professionals Council had spent $70,000 on a re-branding exercise to 'modernise' its image. It recommended *Information and Library Professionals UK*, to be used with a 'strapline', *Chartered Institute for the knowledge professions*.

Members rejected the changes by 644 to 356 with 22 abstentions at the CILIP annual general meeting in September. The society membership is 14,000.

The change would have been the profession's second since 2002 when the Library Association UK merged with the Institute of Information Scientists and adopted CILIP. Society councillors had worked on the latest re-badging since March. CILIP Chief Executive, Anne Mauger, launched the campaign for a two-third 'yes' vote saying:

"We believe our members want a name that clearly and confidently says who we are and where we are heading… These changes have two goals – to be relevant to the breadth of the information, library and knowledge professions and to make their identity clearer to the world."

Discontented members mounted a mid-year attempt to halt the re-make as a 'waste of scarce resources' but lost that first round. Bloggers scoffed at the suggestions with mocking names and acronyms:

- Chartered Library Office Society, England Department *(CLOSED)*
- Library Association that Educates, Facilitates, Enlightens and Engages *(LATE FEE)*
- the Queen's United Institute for English Thinking *(QUIET)*

CILIP Council Chair, John Dolan, accepted the 'no' vote but pledged future changes for the society: "The proposed name change was one part of the rebranding project, which is in turn one part of the broader change programme at CILIP; a change programme to make sure we provide relevant offers to the breadth of the library, information and knowledge professions."

1 The ILPUK acronym is used by a three-partner legal firm in a London E15, International Legal Practice, www.ilpuk.com.

## NZ Court modernisation RM project mothballed


Chester Borrows

**The New Zealand Auditor-General has been challenged to probe the country's Ministry of Justice decision to mothball the third phase of an $18 million e-bench records management project. Dumping the project, the centrepiece of Kiwi Government's law courts digitisation system, came in the same week as its enabling legislation was published.**

The system was intended to let judges open and edit digital files in court. It was supposed to be implemented in July but had been postponed until the new year. Then, in November Courts Minister Chester Borrows announced that the system would not have lived up to expectations and had been put on hold.

His announcement came in the same week that the Government introduced its *Judicature Modernisation Bill* "to enable courts to move into electronic case management and publishing".

Court Minister Borrows said that the e-bench software would, after all, have relied on paper and would not have delivered the Ministry's goals.

"The whole thing was designed about six years ago. What we've found is, when we've looked at other jurisdictions in other courts and other government agencies, they're doing similar things to a much higher level, and as good as that was going to be it was never going to give us a paperless court."

### Waste of taxpayers' dollars

He insisted that the taxpayer money spent on the project, he agreed likely to be in the hundreds of thousands of dollars, would not be wasted. But former Law Society president Jonathan Temm said the cost would more likely be in the millions, and the Auditor-General should be called in.

Mr Temm told Radio New Zealand News that the courts needed to embrace technology and the decision to put the system on hold was disappointing.

"If the fallback position for the Ministry is to now encourage all of us to go to a paper-based system, I think the fallacy of that is apparent to anyone."


Bruce Symondson

A senior Kiwi archivist Bruce Symondson told the NZRecs listserve: "When will people learn, especially government departments, that an IT project spread over several years has to have step-by-step deliverables, otherwise it will inevitably be taken over by changing technology.

"The legislation is presumably the legal preparation to support the planned results of the software being implemented. The Bill was introduced not knowing that the IT side was about to be canned. I suspect this is an example of the left hand being uncoordinated with the right. The result usually looks clumsy.

"I wouldn't be surprised if the Bill goes ahead using the argument that the courts will go more fully electronic sometime in the future. It's that or pull the Bill, while of course implying that all that legal effort wasn't really wasted. It will be a political decision concerning which option involves least egg on face."

NZ Police have already begun filing charges in digital form and, last month, the Probation Service began providing digital copies of its reports. ❖

**CONTACT US** ✉ If you have any news stories for *iQ*, please contact editor.iq@rimpa.com.au

# RULES OF THE ROAD FOR CULTURAL CHANGE

In this issue, the author explores Joseph M Juran's 'Rules of the Road' by sharing some of Juran's stories and his own experiences and observations over the years using these rules for change.

By **Craig Grimestad**

Joseph M. Juran (1904 – 2008) was an expert in cultural change. *Juran? – I thought he was a statistics/quality guy?* Yes, that's him! You see back in the '70s and '80s statistics was not an esteemed tool for assuring manufacturing quality. Statistics was for college courses, gamblers, and life insurance companies. Juran and several other 'quality gurus' had a huge influence on the 'value recognition' and subsequent maturity of the use of statistics for corporate success. Today, no one in their right mind would buy a piece of equipment that had not been tested and confirmed statistically to be able to repetitively perform its intended task.

Beyond teaching statistics and quality processes, Juran provided insight for implementation of changes. That insight was simple – yet profound. It was intuitive – yet commonly unrecognised and ignored. It explains why many operational changes companies want to make don't happen, at least not as intended; either they are revised, or taking much longer than necessary – or both! *Yeh, Yeh, enough of the buildup – what is it?* Juran identified that for any operational or technological change, there were actually two changes taking place – the operational or technical change, and the **social consequence** of that change. The **social consequence** is a troublemaker!

Juran believed so strongly in this that he included it in much, if not all, of his quality system teachings. I first heard this during a Juran video teaching series on statistics back in the '80s. Imagine my surprise when in the middle of a ⇛

story snapshot

**Joseph M Juran's Rules of the Road**

1. Provide participation to the recipient society
2. Avoid surprises
3. Provide enough time for the recipient society
4. Start small and keep it fluid
5. Create a favorable social climate
6. Weave the change into an existing, acceptable part of the cultural pattern
7. Provide a quid pro quo
8. Respond positively
9. Work with the recognized leadership of the culture
10. Treat the people with dignity
11. Keep it constructive

sequence of statistical teachings, Juran starts talking about how companies have cultures and you must effectively deal with that culture in order to enact your change. He gave historic examples of cultures resisting change and provided recommendations for dealing with that inevitable resistance. He called this set of recommendations the 'Rules of the Road'. As it turned out – it was the most valuable part of the teaching series, and I remember it like it was last week.

*Sure, sure… but this is about records management remember?* Well, records management is on a trajectory to become a well-respected business discipline similar to statistics in the '70s and '80s, and we would do well to benefit from some of the 'lessons learned' along the way. The reality is that if you are an advocate for improving in your company's RIM program that requires changes in what people do, you are a change agent or change advocate! Maybe you didn't ask for it, or don't want to be, but you are. Understanding that the changes you seek will have social consequences and using Juran's Rules of the Road will help you. You can be successful (and actually to achieve your goals – you must be successful) in changing the way people think and behave!

I used to have a cartoon picture of a man pounding his fist on the table on my office wall, which read: "A man convinced against his will, is of the same opinion still". As change advocates, you seek to change the will, the 'want to', for individuals across the company. So we must not only be clear about the change, but also be persuasive in why it is "good for them".

Now I am guessing that you may have thought I was going to say "good for the company", or if you are catching on – "good for the culture". But, truth be told, each individual with "skin in the game" is ultimately looking for their place in the culture, for their success. So in the context of the company and of the culture, why is it good for the individual? Juran likened implementing change to asking individuals to open their mouths and take a spoon full of medicine from a stranger. As a change advocate, you are that stranger!

So as we begin to review the Rules of the Road, let me just make one point of clarity. If you check the references you will note that Joseph Juran actually called these the Rules of the Road for dealing with resistance to change. Well, we know that resistance will be there and ultimately we are working to change the culture to accept the operational or technological change – so why not plan upfront to conduct ourselves and plan the implementation in a way that aids the successful integration of our change into the culture and preclude the cultural resistance? Hence it makes more sense to me to call these the Rules of the Road *for cultural change*. Don't wait for that resistance before you act – plan the implementation to make as little of a ripple as possible. Think of yourself as an Olympic diver on the high dive – even though they do spectacular feats above the water, once they meet the resistance (ie, the water), they enter with barely a ripple. Go for as little of a splash as possible.

## RULE 1 PROVIDE PARTICIPATION TO THE RECIPIENT SOCIETY

This actually is easier and more commonplace today than during the time that statistics was being assimilated into company cultures. At that time it was a bit unusual to include those affected by the change. "Leave your brains at the door" and "we don't pay you to think" were expressions that often represented management's perspective of worker participation in thinking about issues affecting their job. Today we commonly talk about "buy-in", but this goes a step beyond that – closer to "ownership". You want the recipient society to have sufficient participation that they want this to happen. They have "kicked the tires". They have had their questions answered, tried it out in some form – perhaps a pilot, and seen their recommended adjustments included. It's no longer just his or her idea – it's *our* best thinking. They have skin in the game. Their reputation is now on the line. This participation should be ongoing, not just before and during the initial launch. It is common for companies to have a RIM structure that includes executive sponsorship, an executive review board, a records manager and records coordinators. Why not put that structure together upfront and begin the participation process with them?

## RULE 2 AVOID SURPRISES

All of Juran's rules are helpful and important – but this one has career implications! Patterns of culture provide stability and therefore comfort to those in the "society". For change advocates, planning and publicising the path of change to the culture, provides confidence that this new path is stable and will accomplish its goal. In pursuing and implementing change you will be working with two groups – your support team and the recipients.

Your support team will consist of individuals in leadership positions in the society as well as some visionary (and perhaps assigned) members of the society. The support team is where your horsepower comes from – this group includes members that organizationally have responsibility for the activities of the recipients. This group reviews your plans and agrees that these changes will take place. They have endorsed and assigned their credibility to you and your plan! You cannot disappoint them without suffering damage to the

end goal and your own personal status within the culture. Since "things" happen, in spite of good planning, foresight and preparation, it is likely that some potholes will develop on your path. As soon as you see them coming, you must develop an appropriate adjustment to your plan and alert your support team. If there must be a surprise, make it as small and insignificant as possible. *Never* wait until a small problem becomes a big problem before seeking help. The time to call the fire department is when you see a small fire on the horizon, not when there is a raging inferno across the street.

How do you avoid or minimise surprises? Make sure the plan for change is solid – one that can be accomplished in the time allotted. Establish communication lines that keep your support team and recipients up to date. Report project status to the support team regularly. Include accomplishments, still to do's, work in progress, potential issues, and issues in work. Also establish a communication line for "emergencies" – bulletins that provide real time identification of a "crisis" along with resolution options including the path you intend to take (unless directed otherwise).

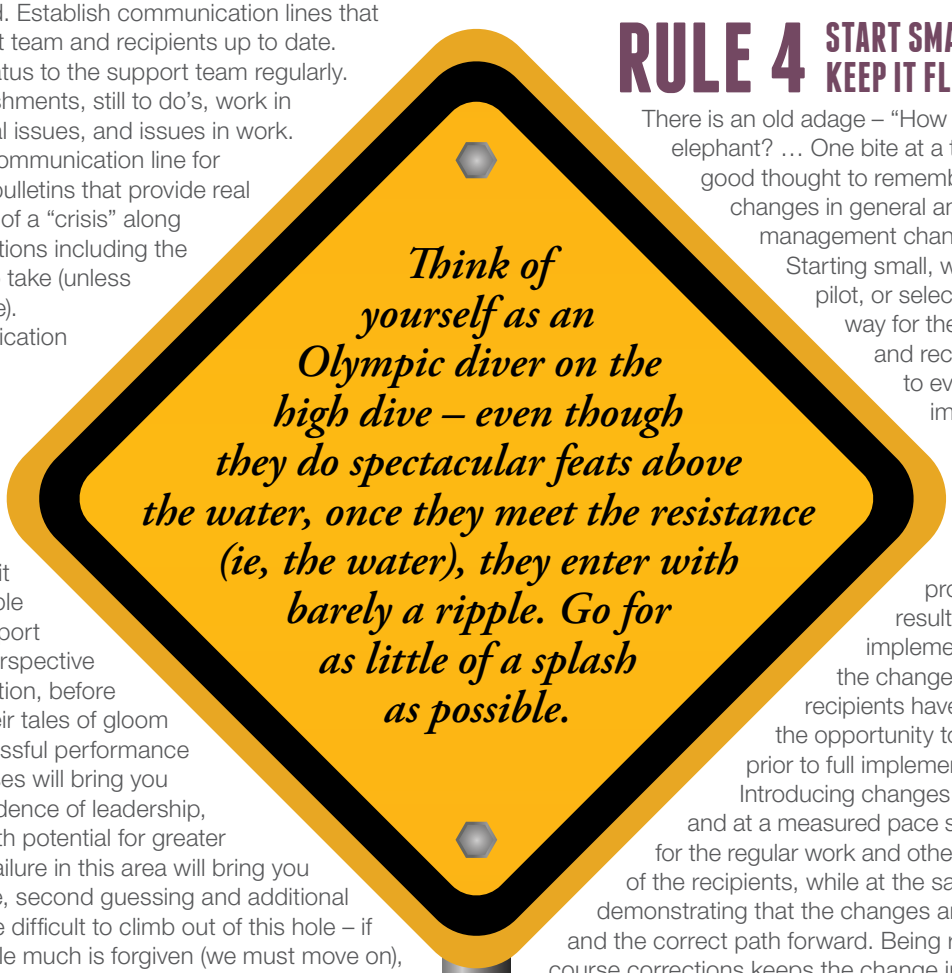
These communication lines need to be established at the outset of the project. At the time of a crisis, without a previously established path, it may not be possible to get to your support team with your perspective and potential solution, before others provide their tales of gloom and doom. Successful performance in avoiding surprises will bring you respect, the confidence of leadership, and accolades with potential for greater responsibilities. Failure in this area will bring you lack of confidence, second guessing and additional oversight. It will be difficult to climb out of this hole – if you ever can. While much is forgiven (we must move on), little is forgotten (not sure I can trust him/her again).

## RULE 3 PROVIDE ENOUGH TIME FOR THE RECIPIENT SOCIETY

The recipient society needs time to examine and then understand the change: What *really* is the intent of the change… Is there a hidden agenda? What is the benefit? Is this the best way to change? Is the change really worth it? What must I do to comply? The recipient society needs time to ponder and answer these questions.

Once the recipient society has examined and understands the change, it needs time to make the changes. Departments and individuals alike are in different situations regarding compliance with the new requirements. Allow each sufficient time to make the changes in a compliant way. There are a number of ways to provide sufficient time to make the necessary changes: The schedule can be established based on the greatest time needed. Scheduling can be staggered, with compliance completion based on specific times needed. Extensions can be given based on specific circumstances.

Juran in his video series called culture change for society "grand", "majestic" and likened it to biological changes. He said, "We have gone from the ox cart to the jet engine – that's progress. But the stupid chick still takes 21 days to hatch. Some people resent that – no progress". Attempts to speed up the hatching of the chick results in death or disfigurement. Not allowing enough time for change will be the root cause of many problems down the road. Allow the chick (change) its required time for a healthy hatch.




## RULE 4 START SMALL AND KEEP IT FLUID

There is an old adage – "How do you eat an elephant? … One bite at a time." This is a good thought to remember for cultural changes in general and records management changes in specific. Starting small, with a test group, a pilot, or selected individuals is a way for the change advocates and recipient society both to evaluate the actual impact of a change. It minimises the risk of a full corporate implementation catastrophe, by providing actual results of change implementation. Now, both the change advocates and the recipients have data to review and the opportunity to propose changes prior to full implementation.

Introducing changes slowly, gradually and at a measured pace shows consideration for the regular work and other responsibilities of the recipients, while at the same time demonstrating that the changes are value added and the correct path forward. Being receptive to mid-course corrections keeps the change implementation fluid. The recipient society is actually able to take comfort in the predictability of a smooth persistent implementation.

*Continued on page 52*

**ABOUT THE AUTHOR**

Craig Grimestad is a senior consultant with Iron Mountain Consulting. His specialty is designing RIM core components with a sub-specialty for RIM auditing. Craig holds a Masters of Science degree in Engineering and was the records manager for the Electro-Motive Division of General Motors where he participated in the development of the GM Corporate RIM program, and implemented and managed Electro-Motive Division's RIM program. He blogs at http://blog.ironmountain.com/author/cgrimestad/

# Q & A: BRONWYN EVANS

The Board of Standards Australia has appointed a new Chief Executive Officer, Dr Bronwyn Evans. An engineer by profession, Dr Evans comes to the role following an extensive global career in healthcare and engineering.

Most recently, Dr Evans held the position of senior vice president, Quality, Clinical and Regulatory at Cochlear Limited. Prior to that she held senior positions at GE Healthcare and Ultrasound. She is a fellow of Engineers Australia.

As CEO, Dr Evans will be responsible for the implementation of Standards Australia's 2014-18 Strategic Plan which unambiguously outlines the organisation's vision, mission and priorities.

iQ asked her about her new role…

**Q. How are you looking forward to your new role?**
**A.** I'm incredibly energised by the challenge of the new role. People have said I have the best job in the country, and I believe them! Standards Australia is a great Australian institution. It's not often you get an opportunity to lead an organisation which is so well respected.

**Q. What developments would you like to see?**
**A.** I'm particularly keen to get the next generation of standards development committee members involved in Standards Australia. I also want to provide opportunities for young women engineers in particular. There are many out there with their talents just waiting to be recognised."

**Q. Why do you believe Standards are important?**
**A.** As an engineer I'm very passionate about Australian Standards and the role they play in protecting the community and advancing the economy. Standards help ensure that products and systems perform the way they are intended to. They help protect consumers and benefit the wider community. They establish best-practice approaches to everything ranging from bridge design to baby cots to records management.

**Q. What impacts have you seen from the introduction of standards (perhaps in engineering)?**
**A.** The great thing about standards for engineers is they establish the basics and enable the experts to put their minds and efforts to solving the bigger challenges. In my engineering experience I have found standards promote innovation by freeing up intellectual capacity.

**Q. Why is it important to have Australian Standards recognised internationally (and for Australian experts to have input in International Standards)?**
**A.** Our goal has always been to align Australian Standards to international standards to the maximum extent possible. This is important in supporting trade, interoperability, and the spread of technology.

**Q. Increasingly we see Australian (& ISO) standards endorsed by government and embedded or referenced in government mandated standards. This is particularly the case in the information, security, risk and recordkeeping domains. Is this a positive or negative trend, considering the impact on, or benefits for society and business?**
**A.** Australian Standards are voluntary unless mandated by government, so it's largely a matter for the regulators. Our focus is on standards development that provides a net benefit to the Australian community and economy.

**Q. Is the ubiquity of digital business and social interaction encouraging a greater demand for standardisation of processes and controls eg, in e-government (Gov2.0), e-health, the services sector?**
**A.** With innovation comes the desire to establish accepted norms. Digital technology is very fast-moving, so the challenge is develop the standards which are required, but no more.

**Q. With more informed and increasing community expectations and scrutiny of government and the corporate sector, are we likely to see more interest in standards around risk management, corporate social responsibility and corporate governance?**
**A.** There are many layers to these issues, but the short answer is yes. Risk management has to be one of the most fundamental of all standards, and it will continue to be so for the foreseeable future.

**Q. What do you see as Standards Australia's key focus over the next 5-10 years?**
**A.** The major challenge for Standards Australia will be ensuring that our portfolio of standards reflect the contemporary needs of the economy and community. With the amount of innovation and technological breakthroughs occurring these days, the demand for standards will be more not less. People want the security of agreed practices and approaches, so we have to ensure we are meeting that demand. ❖

# PUMP UP THE VOLUME

Just as computers and the internet shaped the world of the late 20th century, so big data will be one of the key technology forces at work in coming decades.

By **Ian Grayson**

It started as a trickle when computers first appeared in the 1960s, but now the volume of digital data swirling around the world has become a raging torrent. Fuelled by dramatic improvements in storage technology and high-speed networks, this flood of ones and zeros is reshaping both our business and personal lives.

Dubbed 'big data', the flow is being fed by everything from news services and emails to social media posts and automated sensor networks. Collected by businesses and government departments and stored in vast computer centres, this data is the by-product of our digital lives – and it presents huge opportunities.

Experts believe the power of big data is only just beginning to be understood. They say that, by intelligently sifting through the masses of data being collected, organisations will be able to extract insights and knowledge that previously would have been impossible to find. Social trends will be identified, shopping habits examined, and fraudulent activity spotted as it occurs.

Much of this data is generated as a result of day-to-day activities. Every time you go to the bank, swipe a loyalty card, drive through a toll point or make an online purchase, new data is generated and stored.

The generated data resides in many places. All big businesses maintain large data bases containing personal customer details and transaction records. Each time you interact with them, the information pool they have grows a little deeper.

Technology companies such as Google, Facebook, Amazon and Apple are also strong proponents of big data. By examining their user's constant streams of searches, social media posts and online shopping transactions, they glean insights that allow them to better target their offerings.

## NO SIGN OF SLOWING DOWN

When it comes to big data, the statistics are huge. A typical large company or government department can easily find itself with between 10 and 25 petabytes of data – with each petabyte equivalent to 25,600 terabytes.

Indeed, according to researchers at computer giant IBM, the world creates around 2.5 quintillion bytes of new data every day – that's enough to fill 57.5 billion Apple iPads. Experts estimate the total amount of data in the world is doubling every two years, and shows no sign of slowing.

Ross Farrelly is chief data scientist at Teradata, a US-based company that builds massive storage facilities for large organisations. He says the

growth currently being experienced is just a foretaste of things to come.

"People used to keep only recent data and that which they knew to be of value," he says. "However as the cost of storage has dropped, we are able to store more and more."

Farrelly says the power of big data comes, not just from the sheer volumes involved, but the ability that now exists to analyse it. Sophisticated computer algorithms have been developed that can scan terabytes of data and extract answers to complex questions in a fraction of a second.

Such capabilities are already being put to use in a range of areas. IBM is working with a US hospital to analyse the vast streams of medical data generated by patient monitoring systems. Careful analysis allows doctors to predict and even prevent certain medical conditions before they occur.

In Scandinavia, the company is working with the wind power generation industry to help in the placement of new turbines. By analysing petabytes of information from 35,000 weather stations around the world, precise locations can be found that maximise the output from every turbine.

"The first step is to figure out exactly what the question is that you want to answer," says Graham Kittle, business analytics and optimisation partner at IBM Australia. "Then you can go about collecting and analysing the data that will provide you with that answer."

*The only reason most retail loyalty card systems are established is to gather data about customers*

## USING INTERNET DATA FOR INSIGHT

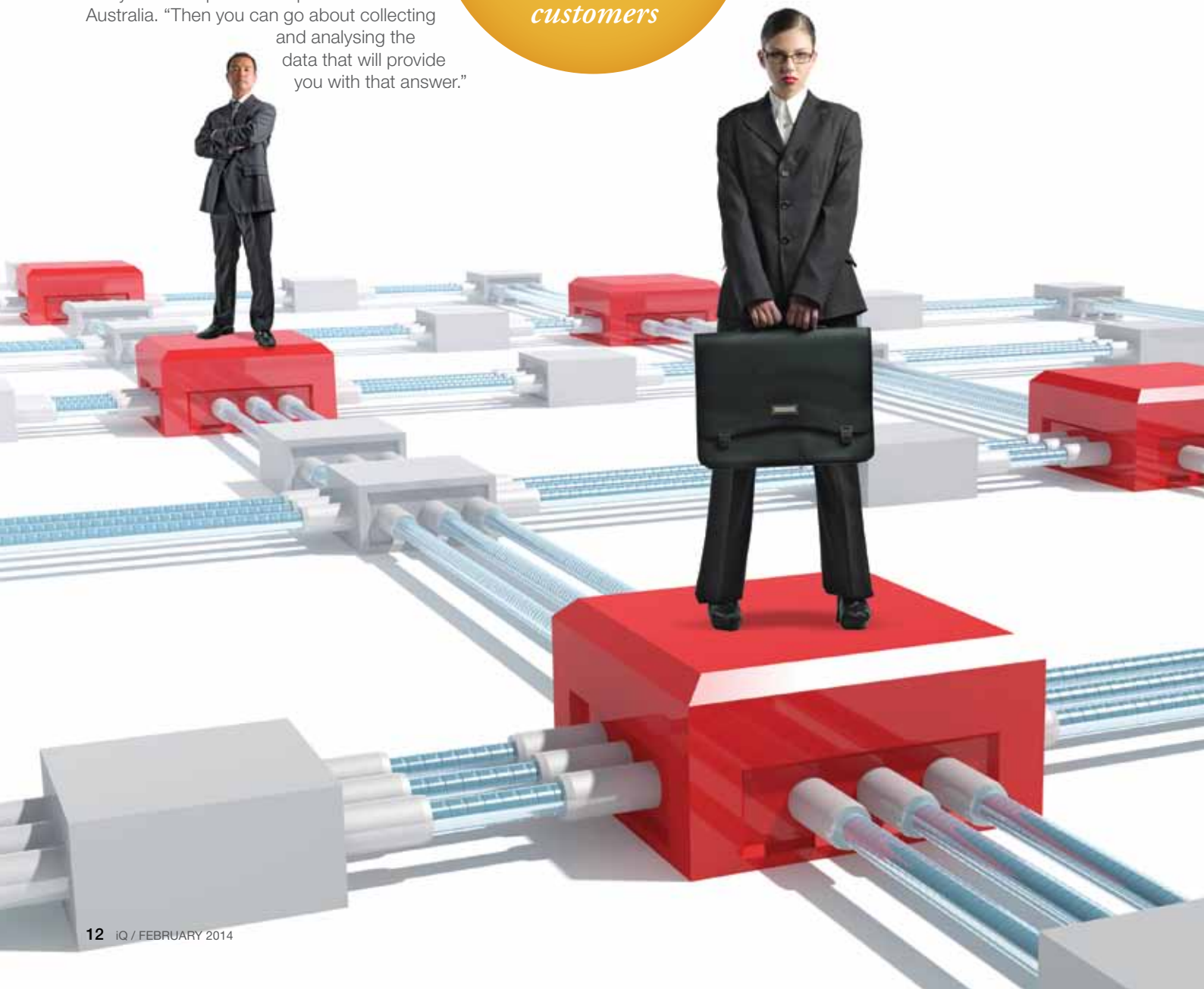
One of the largest sources of big data for organisations of all sizes is the internet. With millions of people searching for a multitude of things, data gathered can provide insights into almost any topic.

"As a marketer, you can connect with people when they are searching for particular topics or issues," says Google Australia's financial services industry leader Mel Silva. "This allows you to tailor your offering based on actual demand and changes in the market."

Silva points to US food company Betty Crocker which used Google's Insights tool to monitor what sort of information consumers were searching for online. The company spotted a 40% increase in searches for information about gluten-free products and quickly brought a range of gluten-free cake mixes to market. Sales rose dramatically almost overnight.

But with billions of searches handled by Google each day, the results generated can provide insights into much more than just food trends.

Researchers within the company recently compiled a list of 45 well-used terms covering typical flu symptoms and treatments. By analysing search term usage on a geographic basis, Google found it could accurately identify countries



where a looming outbreak of influenza was most likely to occur – well before medical authorities were aware.

The same techniques can be used to track voting sentiment ahead of elections, the popularity of new movies and books, and whether consumers are feeling positive about the national economy.

This is one of the most powerful attributes of big data. By collating small pieces of information gleaned from large numbers of people, insights and predictions are made possible that can be used to shape everything from marketing messages to government policy.

Yet, powerful as it is, it's only a foretaste of what's to come. Much of the next wave of data pouring into computer centres will come, not from humans, but from machines talking to each other. This trend, dubbed the 'internet of things', will encompass a bewildering array of devices constantly feeding data back to ever-humming data centres.

## INTO THE FUTURE

Sensor networks in roads will monitor traffic flows and disruptions while video cameras will check crowd flows and detect unusual activity. Packages will automatically report their location and the condition of their contents as they move through a delivery network. Engines will report the imminent failure of a critical component and request repair without human intervention.

Sifting through massive volumes of such machine-generated data will be an even more challenging task, but one that could deliver big returns. Public authorities will be able to accurately predict future need for infrastructure while manufacturers will be able to spot design flaws that cause unnecessary problems in equipment.


### ABOUT THE AUTHOR

Ian Grayson is a freelance journalist and editor who specialises in writing about business technology and communication.

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But while it's clear big data can deliver big benefits to businesses and governments, it also presents some challenges for those providing the raw information.

"The only reason most retail loyalty card systems are established is to gather data about customers," says Teradata's Farrelly. "This information is much more important than any loyalty component involved."

While shoppers appear happy to provide details of their shopping habits in return for points or prizes, this may change when they realise what can be done with it.

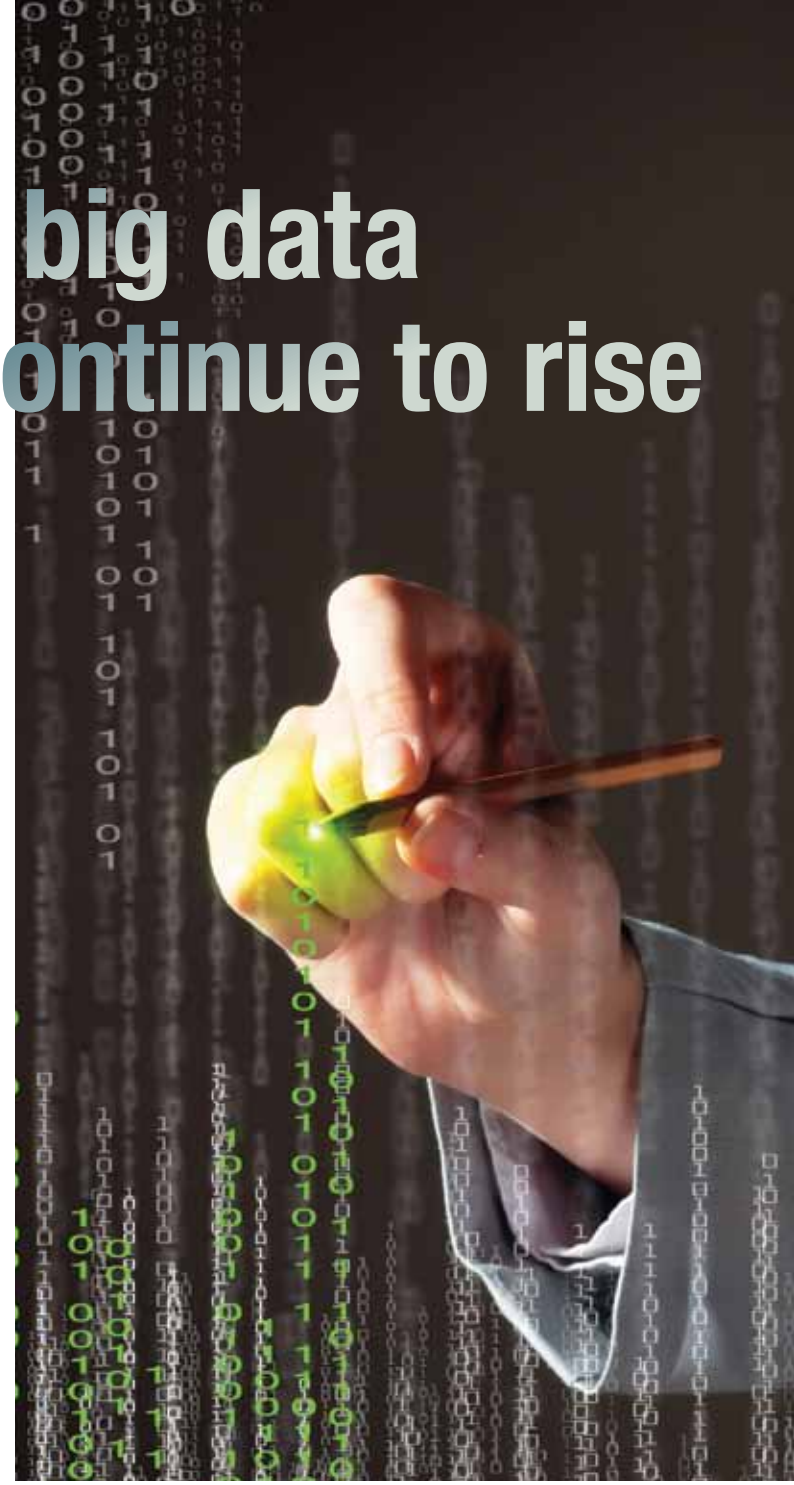
David Bowie, Australian general manager of US data analytics firm SAS, believes consumers are yet to understand the full ramifications of big data and what it means for them.

"Most people are not aware of the extent to which they can be understood as individuals thanks to their data," he says. "Consumers have a right to know how their data is going to be used, but it is a balancing act between public benefit and privacy concerns. There is no right answer and it will continue to evolve."

While privacy and data ownership issues will remain up for discussion, the power of big data will continue to grow. ❖

This article was first published in *Qantas: The Australia Way*, February 2013.

# Survey shows big data investments continue to rise



Big data investments in 2013 continued to rise, with 64% of organisations investing or planning to invest in big data technology compared with 58% in 2012, according to a survey by Gartner Inc. However, less than 8% of survey respondents had actually deployed at the time of the survey in June 2013.

The hype around big data continues to drive increased investment and attention, but there is real substance behind the hype," said Lisa Kart, research director at Gartner. "Our survey underlines the fact that organisations across industries and geographies see 'opportunity' and real business value rather than the 'smoke and mirrors' with which hypes usually come."

The Gartner survey of 720 Gartner Research Circle members worldwide was designed to examine organisations' technology investment plans around big data, stages of big data adoption, business problems solved, data, technology and challenges.

The survey found that of the 64% of organisations investing or planning to invest in big data technology in 2013, 30% had already invested in big data technology, 19% planned to invest within the next year, and an additional 15% planned to invest within two years.

Industries leading big data investments in 2013 were media and communications, banking, and services. Thirty-nine percent of media and communications organisations said that they had already invested in big data, followed by 34% of banking organisations and 32% of services firms. Planned investments during the next two years were highest for transportation (50%), healthcare (41%) and insurance (40%). However, every vertical industry again showed big data investment and planned investment.

From a regional point of view, North America continued to lead investments with 38% of organisations surveyed saying that they had invested in technology specifically designed to address the big data challenge. Asia/Pacific organisations were notably ambitious with 45% indicating that they planned to invest during the next two years. Consistent with Gartner experience, EMEA and Latin America tended to lag in technology adoption, for which big data is no different.

## THE STAGES OF INVESTMENT

Regardless of geography, investment typically has different stages that organisations go through. It starts with knowledge gathering, followed by strategy setting. The investment is small, and mostly consists of time. Then it is typically followed by an experiment or proof of concept. Still, the investment is small and tentative. Then, after completing a successful pilot, the first deployments take place. Here the investment curve rises. Over time, business operations start to rely on the deployments, and the investments move from implementing systems to managing them.

"For big data, 2013 is the year of experimentation and early deployment," said Frank Buytendijk, research vice president at Gartner. "Adoption is still at the early stages with less than 8% of all respondents indicating their organisation has deployed big data solutions. Twenty percent are piloting and experimenting, 18% are developing a strategy, 19% are knowledge gathering, while the remainder has no plans or don't know."

Looking at big data adoption for those organisations that had made investments, 70% had moved past the early knowledge gathering and strategy formation phases and into piloting (44%) and deployment (25%). Among those planning to invest during the next two years, 80% were in the earlier stages (knowledge gathering and strategy phase).

The survey revealed that there are a wide range of business problems being addressed using big data, although there are some clear patterns. In Gartner's 2012 and 2013 studies, business cases that improve process efficiency and business cases around customer experience dominate big data wish

lists. In the 2013 survey, 55% of organisations said that they were currently addressing enhanced customer experience using big data, while 49% were using big data to address process efficiency.

Some of the big data activities are incremental to current business practices; for example, better understanding customer needs, making processes more efficient, further reducing costs or better detecting risks. These make up the majority of the use cases today. Some organisations are engaging in more 'game-changing' activities; for example, 42% were developing new products and business models, and 23% were monetising information directly. Gartner believes this is encouraging, as the big opportunities lie mostly in these areas.

"While there are many areas companies would like to address, a slightly different picture emerges when we ask about the priority of these categories," said Ms Kart. "Different industries have different priorities when it comes to big data. Industries that are driving the customer experience priority are retail, insurance, media and communications, and banking, while process efficiency is a top priority for manufacturing, government, education, healthcare and transportation organisations."

Just as big data priorities are changing, Gartner has observed that big data challenges shift with organisational maturity in information management, especially handling big data. Organisations were struggling most in 2013 with knowing how to get value from big data, compared with 2012's top challenge of governance issues. This is followed by difficulties in defining a strategy while obtaining skills; it also remains a critical issue for one-third of organisations.

"It is interesting to note that understanding 'what is big data' is the top challenge for 15% of organisations," said Nick Huedecker, research director at Gartner. "Perhaps unsurprisingly, this concern came mainly from respondents with no plans to invest. Organisations should be sure they are educated about big data opportunities in their industry to ensure they are not missing the boat." ❖

Additional information is available at http://www.gartner.com/resId=2589121.

# BIG DATA NEEDS BIG CLASSIFICATION

"If search engines can find a needle in haystack, surely this spells the end of record keeping?" chorused the IT professionals. "And just who do you think turned those fields of hay into neat haystacks?" responded the record keepers. This article is about a recordkeeping system for the future. The system will have the following features: all information within an organisation's domain is its management responsibility and it will apply the corporate classification scheme to all information at machine speed at an agreed quality threshold.

By **Andy Carnahan**

Some years ago I had a big idea about what an enterprise content management system would look like in the year 2050. At its core was a system able to perform classification of information at machine speed.

This seems to be the primary shortcoming of our present systems. We create information, distribute it, search index it, all at machine speed, yet we still continue to classify it at human speed. The future system additionally performs the classification across the entire data set of the organisation, not just the designated records repository. It does not need to 'possess' the data to govern it.

We may not get to this system by accident, although it appears we are stumbling blindly towards it in a slow Darwinian march. Far better if we take deliberate actions and harness significant input by those who can develop the specifications for the system. It is not an accident that I am writing this in a journal for recordkeeping rather than IT. To me, the key to this system is to extract the organising process that is embedded within the collective consciousness of the recordkeeping profession and externalise it into a synthetic machine speed agent.

To classify at machine speed has enormous benefits – it addresses the 'big data' dilemma. For organisations, being able to have related sets of information 'find each other' without human intervention will enable corporate knowledge to blossom in ways we can scarcely imagine. Far from spelling the end of the recordkeeping profession, information management specialists will manage the semantic engines that create meaning from the mountains of information. It is a profession of finesse and tuning to best create knowledge from data and information. The contribution of record keepers will be one of the most important functions of the entire organisation.

To the recordkeeping and information management community of 2013 this may seem like a fantasy. A constant complaint I hear is that 'Records' is the last to know about new systems and is never invited to 'sit at the table' when management decisions are required. My impression is that currently recordkeeping is largely a rote activity, where records staff 'load' the classification schema into their heads and then process information. It is a vital yet mentally menial task, equivalent to working on a production line.

*story snapshot*

We create information, distribute it, search index it all at machine speed, yet we still continue to classify it at human speed.

A new model where the content is managed at the speed of creation will emerge.

These new content management systems will have as profound an effect on society as Gutenberg's printing press did in the 15th century.

In this article I want to issue a challenge to and a vision for RIM professionals about the coming wave of content management. My vision is that we will see systems over the next 50 to 100 years that will have as profound an effect on society as Gutenberg's printing press did in the 15th century. My challenge is for the profession to become active proponents and contributors to this next wave of knowledge management.

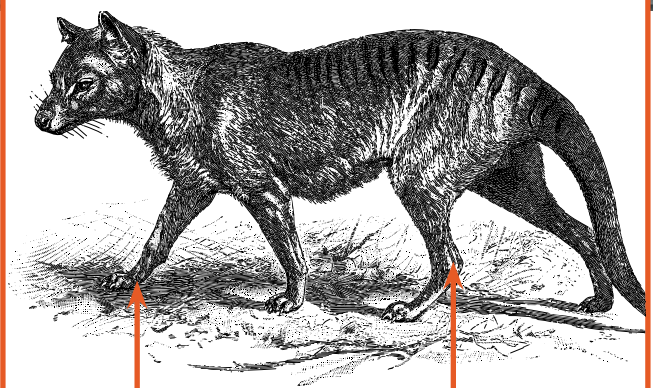
Since the development of the transistor and the relentless march of integrated circuits, information technology has primarily been about the technology. Organising that information has substantially been an IT function to increase the brute speed of literal indexing. IT has enabled the industrialised *production* of information, yet the *management* of information remains a cottage industry. This is the central problem of the big data phenomena – we are creating information at volumes, velocities and varieties at a rate that is continually accelerating beyond our capacity to manage it. Paradoxically, the current solution to big data seems to be producing technology that enables data to be created and transmitted even faster!

This is a temporary dilemma and will remain until we invent systems able to curate information sets to the same standards as our recordkeeping units but at a speed equal to the speed we receive, distribute and produce information. This solution needs to come from the expertise of those who know how to organise knowledge. This is not an IT function, it is recordkeeping function.

## RECORD KEEPING: THE ANIMAL ANALOGY

To step back and look at record keeping there have been two distinct phases in the past 500 years. The first phase lasted almost 500 years, the second is a transition phase that will be short lived. Think of information management as an animal, where the back legs are the information and the front legs are the management. We had 500 years to perfect the information management model where the speed of information creation was matched by the speed of information management. The production of information was conducted at a human pace and it took a significant amount of both time and effort to produce any sizable work. The management of that information was also performed at human speed. This worked well until the latter part of the 20th century when the production of information began to be conducted at machine speed. By the 1990s this model had become the Tasmanian tiger of record keeping. It was practically extinct and had been replaced by the unbalanced kangaroo of record keeping.

### ECM model: 1500 to 1990



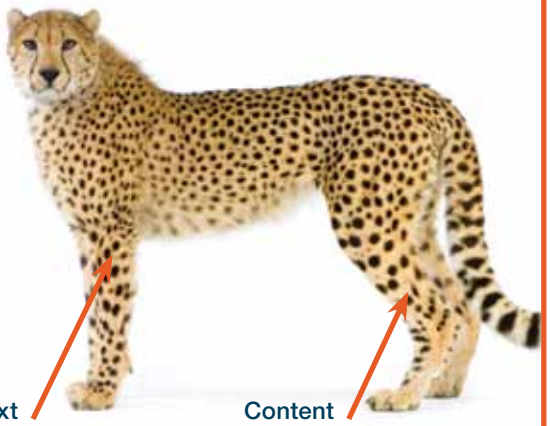
| Context | Content |
|---|---|
| Manual record keeping | Physical content |
| Central registry | Manageable growth |
| Human classification | Single instance |

## ECM 'big data' model: 1990 to 2040

**Context**
- Manual record keeping
- Single instance ECM
- Human classification

**Content**
- Technology created
- Huge volumes
- Indexing speed/access

## ECM model: 2050 to ?



**Context**
- Synthetic RK
- Semantic indexing
- Machine classification

**Content**
- Technology created
- Federated search
- Indexing speed

The kangaroo of record keeping has huge back legs of information but tiny arms of management. We can create the data but we can't manage it. Or more correctly, we create the data at machine speed and continue to attempt to manage it at human speed. It is a noble futility. We can't stop trying to manage it this way but the impact of our efforts are very limited.

In the early 1980s most information in an organisation resided in a tightly controlled central registry. It moved physically (at human speed) in and out of the registry for action (at human speed). There may have been small amounts of unstructured information sitting in four-drawer filing cabinets but that was its extent. Barely 30 years later, almost all information sits in locations that did not exist in 1980. Email exchanges, file shares, sharepoint sites, intranets, extranets, internets and social media are now in common conversation and generally reside outside of a central registry model. These are the legs of the kangaroo. The records management response to this explosion of information outside of the traditional repository was of denial. Through a twist of reason it was stated that if the information did not exist in the records repository, somehow it was not a record therefore it was neither relevant or the responsibility of records. Little wonder the invitations to the decision-making table dried up!

During the kangaroo era (the big back legs of data and the small arms of information management), software was created to move the information more quickly to the records staff to classify. This created a 'better' bottleneck as the delivery of information occurred at machine speed and the processing (classification) still occurred at human speed. The process of classifying information was then attempted to be pushed out to end users to classify their documents using a common classification schema. The intention was good but the compliance was very low. Imagine during the kangaroo era, the Tasmanian tiger's back legs are growing as data explodes and the front legs are shrinking as the management of the data reduces. The thylacine has now morphed into the kangaroo.

The kangaroo era represents the era of noble futility for the recordkeeping profession. The speed, volume, location and format of information keeps growing and the current human powered management toolset is less and less capable of providing governance, let alone useful access to the information trapped within the data.

## THE EMERGING MODEL

The effective information management model I see emerging from this situation is different because of the use of technology, however it is not different to the principles of information management that have been formed over hundreds of years. Because of technology, the model of information management must operate at machine (computer) speed. It must still classify information at a quality equal to a human classifier but at a speed equal to a machine.

As a starting point, the classification of documents must be automatic. A synthetic agent must be able to 'read' the document and determine the context of the document for the organisation. For example: Who wrote it, what is it about, what needs to be done with it/was done, what are the key terms this contains, when did it happen? These are pieces of data that records officers extract from documents to create the 'index card' (usually electronic) to enable that data to be usefully recalled and to become part of various collections for searching and retrieval – a customer set, a subject set etc.

To automatically classify documents is a big step forward and significant progress is occurring. The tools to achieve this are being developed and some are now nascent commercial products. The easiest part of the challenge is to embed the process of using a rule set. Much harder is to 'teach' an awareness of the world (the 'rule set' of common sense we learn in the early years of life) and then the ability to read and interpret what we learn in many years of schooling.

All of the synthetic recordkeeping agents are still in their infancy however they will grow and mature in capability (just as we humans do). By way of example, the early optical character recognition (OCR) software of the 1980s was a very tedious product. It could only scan documents in one typeface and size and even then required careful proofing to ensure the scanned information reflected the original. The effort to do this was equal to the effort of manually rekeying. Today, we can scan documents with different typefaces, embedded tables, images, even handwriting and expect to see a very reasonable digitisation of the contents. Simple documents are scanned at such high accuracy we don't even check them. Of course the conversion is also done at machine speed. Automatic classification is significantly more complex than OCR, the point is that the beginnings of any process are slow and unsure.

The technology side of automatic classification belongs to the technologists to build the tools. The classification side belongs to the record keepers. How the organisation both unlocks and protects the value of its data is the core of record keeping. Record keepers need to start from the assumption that we can automatically classify information. From this starting point the question is, "What does it look like?"

## SYNTHESISING THE MODEL

For Denise Bedford, Professor of Knowledge Management at Kent State University, the process is to break down how we make classification decisions so bit by bit the model can be synthesised. This includes how we process written language to infer meaning and context from verbs, nouns and adjectives to determine the 'who, what, where, when and why' of decision making as we do with our natural language processing foundation. We then pass this part-processed information through our learned knowledge bases for the subject and business functions and then analyse the information to establish a good 'guess' at the intent of the information creator. This allows a records officer to make a good quality decision about how to treat the information.

One critical threshold for a synthetic agent is for us to determine an acceptable quality point for decision making. Classification is a nuanced activity and not a binary process. A good classification index helps bring related items together. A good records officer will be constantly making 'good enough' rather than 'right or wrong' decisions. We can make the synthetic agent operate at higher and higher speeds but we want it to classify at an agreed threshold to avoid a 'six degrees of separation' situation, where every piece of information could conceivably be linked to every other piece of information.

We are seeing elements of this enterprise content management system already. Google's mission statement is to "organise the world's information and make it universally accessible and useful". The Google core engine is a concordance search engine but at the user interface we are continuing to see a more semantic search tool and I predict we will soon see a disambiguation option. Google, in effect, will be creating a virtual classification schema using firstly ambiguity-splitting and then it is only a short step to using a thesaurus for synonym adding. From there, it is a 'small step but giant leap' to having a classification schema with disposal/retention capability.

A 2009 PhD submission titled 'Human-competitive automatic topic indexing' by Olena Medelyan from the University of Waikato is precisely the phrase for the systems of the future, although the human-competitive component is the quality and the machine speed will far exceed human capacity.

This article began with an observation about finding needles in a haystack. Search engines are incredible at finding those needles, however it is the role of recordkeeping to 'harvest' the hay and group it into useful, related and accessible stacks that enable searching to be so productive.

The current problem is that the fields are being created at a speed far faster than we can harvest them into those haystacks. We cannot stop the flow of the information so we must develop systems and processes to harvest the fields at the same speed they are growing.

For those willing to take up the challenge, there is an interesting, rewarding and fruitful path ahead. The 'old' model, as characterised by the Tasmanian tiger, is extinct; the transition model of the kangaroo is becoming more and more unworkable. A new model, where the content is managed at the speed of creation, is the model that will emerge.

If we want to get back at that elusive table, this is our invitation for VIP seats. See you there! ❖


### ABOUT THE AUTHOR

Andy Carnahan is an IT heretic who used to believe the record keeper was dead but now firmly believes the recordkeeping profession (somewhat unknowingly) holds the key to the big data lock. Andy has spoken at RIM Professionals Australasia and AIIM events on the theme 'Big data needs big classification'.

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# COLLABORATION IS KEY IN OPEN SOURCE SOLUTIONS

RIM professionals must be part of the project team for all open source solutions. Adopting the amended ADRF framework (see Table 2, page 23) could be an enabler for opening dialog and working collaboratively with business and IT stakeholders.

By **Linda Shave**

There has been much talk of late about cloud computing. Many enterprises are still expressing concerns around risks such as security and privacy issues and asking questions in relation to intellectual property, location and ownership of data and information assets in the cloud.

CIOs and members of IT departments are asking these questions because they feel that cloud-based platforms can bring together disparate groups, people, processes and systems. Providing them with tools and cost effective solutions, for collaboration, managing the big data explosion, virtual information asset management and mobile workforces. Thus, enabling business to attain new levels in information sharing and workflow automation for ongoing sustainability.

Records and information management (RIM) professionals are asking similar questions including what will be the impact of cloud outsourced solutions on traditional recordkeeping and record management practices? What will open source records management as a service look like? What steps might they take in addressing the big data and the digital explosion? What tools might they use to embark on the journey?

Essentially, I believe that cloud provides new opportunities for RIM professionals to move away from outdated practices and develop new information-centric designs and approaches for information asset management, records management and governance.

*…what will be the impact of cloud outsourced solutions on traditional recordkeeping and record management practices?*

Open source records management software is interesting because, to date, document/content management and records management software have had very different goals. Records management is based on 'compliance' (transparency) and is primarily based on regulated standards, file attributes, hierarchical structures and business classification schemas that have worked very well in classifying, tracking and managing records in the physical (paper) world, but have been struggling since the digital explosion.

By contrast, databases and document/content management systems are not based on regulated standards, but on best practices, business rules and processes with an outcome focus of mining data and information in order to improve efficiencies, decision making and collaboration.

Enterprise content management (ECM) suites that combine document management, imaging, web content management, records management, workflows and document-centric collaboration are not new. So what is new? In open source software solutions it is the concept of enterprise information-centric approaches, metadata management, business processes and workflow modelling.

## OPEN SOURCE ENTERPRISE CONTENT MANAGEMENT AND RECORDS MANAGEMENT PLAYERS

One of the players in the open source space is Alfresco, an open source ECM solution that has been built utilising best-of-breed standards, contributions from the open source community, a team of experts and other senior industry players.

In Australia, Lateral Minds, a Sydney-based company (www.lateralminds.com.au) is one of the members of the Alfresco Systems Implementation and Training Partner networks in Asia Pacific. As an Australian-based company, Lateral Minds' Chief Executive Officer Alex Lee and his team are very much aware of the challenges that RIM professionals face in the digital explosion and the difficulties in balancing governance, risk and compliance (GRC) obligations.

With this in mind, and in collaboration with the Council of Australasian Archives and Records Authorities (CARA), Lateral Minds developed an ISO: 16175-2 compliant records management open source software module built on specifications as defined by the International Council of Archives (ICA) 2008 Guidelines. These guidelines specifically address the Australian (ADRI) and New Zealand (PRA) records management requirements and four functional areas of the Australasian Digital Recordkeeping Framework (ADRF): making/managing digital records, keeping digital records, transferring digital records and using digital records.

## MEETING THE CHALLENGES OF OPEN SOURCE RECORDS MANAGEMENT

Can open source software add value to future records management practices and meet the challenges of the big data and digital explosion? I believe it can, but care needs to be taken. As previously highlighted above, there are fundamental differences between current record management approaches and database, document/content management methodologies.

There needs to be a balance between operational expectations, business rules, governance and compliance obligations. To date much of the focus has been on the long-term archiving aspect of records management, leading to some excellent standards for historic preservation, but these are failing to stand up to the current needs of information and records managers in meeting the day-to-day operational requirements.

Open source records management has great potential. However, replicating contemporary problems that are already struggling, such as using metadata as a file attribute applied at the end of the document lifecycle, manually applying a business classification schema and inheriting security/access permissions from the folder into an open source record management solution will not solve current problems. It will only move them.

Any transition to open source solutions for managing all information assets must take a holistic view of the entire life cycle of big data and digital-born assets. This will require moving to information-centric and business taxonomy driven solutions that include recordkeeping as a fundamental underpinning element of the business process workflow. In other words, building solutions for the business with the business, as technology alone is not the panacea for all enterprise solutions. Adoption and change will come from understanding the underlying business requirements, the value of information assets, drivers, governance, current and future strategies.

## TIME FOR COLLABORATION

Scoping and functional requirements, which are often trivialised and/or skipped is fundamental to a successful design and implementation of any open source software solution now and into the future. Migration to open source

software solutions must have more substance to it then simply dumping data and objects indiscriminately. There is a need to work collaboratively with business stakeholders, IT and information and record professionals to ensure that the information assets being migrated are cleansed, have quality metadata and are complete and accurate.

Metadata is not new, it has been around since the 1960s and used in libraries for classifying and categorising materials eg, based on title, author and subject. In an electronic document record management (EDRM) system, metadata is traditionally applied at the end of the document life cycle as a file attribute. It relies on the business knowing what classification/terms to use, how to title the 'record' and where to file the 'record' based on folder structures to organise agency/business information. Coupled with this, security/access permissions are customarily inherited from the folder in which the 'record' resides. This approach is silo in focus, inflexible and restrictive and generally relies on 'records' residing in a single location.

In open source solutions metadata management, processes and workflows will form the foundation for information asset management and be the link between people, data, applications and technology. Information assets will inherit the appropriate recordkeeping retention rules, access and security permissions at birth from its metadata. Recordkeeping retention rules, permissions and security controls could automatically change based on who is using the information, its location and status eg, draft, review, approved and its stage within a particular workflow.

To this end, RIM professionals must be part of the IT project teams. IT must listen to the wealth of knowledge these professionals can supply in the development, design, delivery and on going monitoring of an open source record management software solutions. Such solutions should intertwine and complement ongoing and evolving record keeping, record management and virtual information asset management needs, provide a cultural transition program and provide the new information and records manager with new open source record management skills to move forward with. This will be challenging, given the speed at which technology moves.

## CAN THE ADRF FRAMEWORK BE ADAPTED FOR CLOUD OPEN SOURCE RECORD MANAGEMENT FOR VIRTUAL INFORMATION ASSETS?

Yes. As previously indicated, Lateral Minds has developed an ISO: 16175-2 compliant records management open source software module built on specifications as defined by the International Council of Archives (ICA) 2008 Guidelines and the four functional areas of the ADRF. In its original format it might not be apparent how RIM professionals might be able to apply the ADRF framework as a valuable planning tool with which to work collaboratively with business stakeholders and IT as they consider cloud strategies for open source opportunities for managing virtual information assets regardless of their type and location.

By adopting the BizWyse® colour matrix approach to the ADRF framework and extending it to include a more information-centric approach that includes metadata management and BPM, the matrix becomes a viable tool for consideration. It takes a practical approach by colour coding the ADRF four functional areas (see Table 2).

The BizWyse® matrix uses a five colour palette of blue, yellow, green, pink and purple (Table 1).

| | |
|---|---|
| **Step 1** | Functional requirements, process models, *BPM including Social BPM, semantic web, metadata management and interoperability.* |
| **Step 2** | Inter-relationships between functional requirements for creating accurate and reliable records, long-term formats, preservation, security, *metadata management, risk management, information governance*, expunging and migrations. |
| **Step 3** | Inter-relationships between preservation treatment and ongoing (*cloud vault*) storage and presentation. |
| **Step 4** | Inter-relationship between business functional classifications/taxonomies, *metadata management, BPM including Social BPM*, migration strategies and automatic transfer of records/metadata. |
| **Step 5** | Technology specifications, *eGov3 Information Centric, Semantic Web, open source* procurement and managing changing technology to sustain business/government over time. |

Table 1 – BizWyse® colour coded steps for use with the ADRF framework.

The colour coding highlights the relationships between each area, this approach has worked for me and could be an enabler for you as it provides a simple colour chart to follow, with extended features highlighted in italic text and a holistic view of how to map it across an enterprise platforms including cloud. For example in Table 2, 'blue' represents all functional requirements, process models and interoperability areas within and across the ADRF four functional areas and would be the first of five steps when applying the ADRF framework.

| 1 Making and managing digital records | 2 Keeping digital records (both in the agencies and in the archives) | 3 Transferring digital records to archives | 4 Using digital records and archives |
|---|---|---|---|
| Creating accurate and reliable records. *Metadata management, risk management, information governance.* | Preferred data formats for long-term preservation. *Metadata management.* | Preferred data formats and methods for transferring records to archival custody. *Semantic web, metadata management and interoperability.* | Legal provisions affecting access to archives in digital form. *Metadata management and interoperability.* |
| Classification and control metadata for records. *Metadata management.* | XML-based approaches to digital preservation. *(Ongoing strategies to be built into solutions and monitored).* | Methods for automatic transfer of recordkeeping metadata. *Metadata management, BPM including Social BPM.* | Expunging of sensitive data from public access copies. *Risk management, information governance.* |
| Technology-specific issues for records (eg email; encryption; web-based resources). | Migration paths for long-term digital records. *Metadata management, BPM.* | Maintenance of provenance and authenticity. *Metadata management.* | Storage and presentation of preserved data formats. *Cloud vaults.* |
| Functional requirements for recordkeeping systems. *Semantic web, metadata management and interoperability.* | Preservation treatment of specific data formats (eg database-derived records; web-based materials). | | Certification of provenance and authenticity. *Metadata management.* |
| Model procurement specifications. | Process models for preservation of digital records in agency custody. *BPM including Social BPM.* | | Fraud prevention. *Metadata management, risk management, information governance.* |
| Compliance assessment and/or self-diagnosis. | Dealing with changes in the machinery of government over time. | | Data re-formatting and presentation (eg databases). |
| | Process models and recommendations for retrieval of records from defunct systems or media. *BPM including Social BPM.* | | Searching and discovery mechanisms. *Metadata management, semantic web (tagging).* |

Table 2 – Four functional areas of the ADRF framework (http://www.adri.gov.au/appendix1.aspx) colour coded with extended features for cloud consideration in italic text

Government agencies need to be responsive to the changing horizon. Even though the features and capabilities of products such as Alfresco open source records management are now being understood in the market place. If information and record managers are unable to understand what they need and what they need to do, they will fall back to what they already know and have, rather than looking to innovate. This being the case, IT and business stakeholders may start excluding information and record professionals as open source solutions become more agile in delivering information governance, metadata management and record keeping as a process. The adoption of the ADRF frameworks as amended (Table 2) could be a starting point for all information and record professionals to open a dialog with the business and IT stakeholders when the agency is considering the move to a cloud hosted record management solutions for all big data and information assets.

The outlook is bright; today the clouds, tomorrow the stars. Collaboration is the key to our information asset management and recordkeeping future. ❖


## ABOUT THE AUTHOR

Linda Shave is a researcher, consultant and analyst in areas of virtual information asset management, business process management, workflow automation, corporate governance and risk management. She is a former CEO, CIO and is a member of numerous professional organisations.

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# We need that in paper... or do we?

How to help your organisation transition to digital business frameworks.

By **Kate Cumming**

For people living in an increasingly digital and online world, many of our colleagues are finding it hard to transition to digital business frameworks. For instance, many of us working in records and information management are still asked 'what records do we need to make and keep in paper?', or 'don't I need a hard copy file for that?' or 'shouldn't I print, sign and then scan that?' or 'all outgoing correspondence needs a signature so we can't make this a digital process'.

It is very common for people to think that there are specific legislative or compliance-based drivers to make and keep hard copy records. If it best suits your business operations to do this, then by all means make and keep paper records. Today, however, the majority of systems and transactions are digital and so it makes sense that the records should be digital as well.

Legally, however, we don't need 'wet signatures', scans of signed correspondence, or digital images of signatures that can be dropped into correspondence. We don't need to be trying to replicate paper processes in a digital universe, we simple need coherent and business appropriate procedures that give us process and surety in the digital world.

## THE LEGISLATIVE FRAMEWORK FOR DIGITAL PROCESSES

The legislative framework to allow this has been in place for a long time. The *Electronic Transactions Act* and the *Evidence Act* give parity to digital and paper processes. The Electronic Transactions Act allows organisations to use electronic technologies to do business, and specifies particular signature requirements and elements of a signature that digital signature methods must satisfy if they are to replace written signatures.

*story snapshot*

By helping to transition away from paper mindsets, from information proliferation to strategic information management and into planned cloud arrangements, we can fundamentally help to shape positive futures for our organisations.

Essentially, according to section 9 of the *Electronic Transactions Act*, a signature must identify a person and indicate their consent for the transaction, the method used to sign must be reliable and appropriate, and the recipient of the signature must be satisfied with this form of signature. Apart from these general guidelines, the Act doesn't specify any characteristics for legally acceptable digital signatures – these are left to business needs to determine.

The *Evidence Act 1995* abolishes the 'best evidence' rule and allows for evidence which is, for example, a copy of a document in electronic format, or a version of a document produced by a device such as a computer.

There is, however, under the Act, a need to support the admissibility of this evidence by authentication (ie, giving evidence that the digital output/copy is what it purports to be). This sort of authentication may involve testing the way a document was produced or kept or some other means of demonstrating that the methods by which you keep and maintain digital information are secure, reliable and well managed.[1]

As with virtually all areas of business, you just need a formal process or standard procedure to demonstrate that this is a normal business practice, for example, all email about these enquiries is sent from this account, or all invoices are automatically sent from this business system, or all comments about this policy are responded to via this social media channel, or copies of all outgoing correspondence are captured into the EDRMS with an annotation in the notes field indicating that it was signed and sent on a certain date.

## IS THE 'WET SIGNATURE' THE BEST EVIDENCE?

In the paper world, that formal process usually was a 'wet signature' – ie, someone signing a bit of paper with a pen. In the digital world you can adopt a digital process that replaces this as your formal, adopted process. For example, at State Records, ⇒

just about all our approvals are done digitally via email. A formal email from someone's official account with their account name and signature block is all that is needed as authority for an official approval.

Some people still have the belief that a paper record, or a scanned surrogate of a paper record provides the best evidence but increasingly this is just not true. In many instances, a paper surrogate of a digital record is not the best evidence because these paper versions of born digital records will have lesser integrity and lesser capacity to leverage the inherent business and accountability components of born digital records. Translating digital records into paper and then scanning that paper to be captured into an EDRMS results in the loss of large amounts of metadata. EDRMS and other business systems today can leverage that metadata and use to it automate a lot of search, classification and authentication processes, so eliminating that metadata through print and scan processes actually results in the loss of a lot of potential business value.

Therefore, we shouldn't let people's fondness for paper distract us. There are no general requirements for records to be made and kept in paper form and paper processes in a digital world can result in a lot of inefficiencies and lost business value.

Ultimately records and information management is a business need and not a separate compliance process divorced and separate from standard business operations. Records and information management should not impose requirements on your staff or your business that are alien to business needs and requirements. Records and information management exist to provide our organisations with the evidence and information they need, when they need it and in the form that best suits business operations, now and into the future.

In the current business environment, there are a range of other areas too where, as records and information management professionals, we need to be helping our organisations move strategically to digital frameworks.

## MANAGING THE PROLIFERATION OF DIGITAL INFORMATION

The attitude still persists that digital storage is cheap but today, no matter how you look at it, virtually every organisation is maintaining more digital information than it can afford to keep and we urgently need to assist with the strategic management and the planned and consistent destruction of time-expired digital data.

The time for complacency has passed and organisations need to acknowledge that they cannot keep everything forever. As records and information professionals, we need to be incredibly proactive and strategic and design ways to keep what our organisations need to keep and to appropriately destroy the information they no longer require.

Every organisation needs to proactively do this now and not allow depleted ICT budgets with no capacity for rising data storage costs to make general, sweeping data storage cuts.

Information is a core business asset. It is our responsibility to ensure that existing record retention and disposal requirements can leveraged to ensure core, long term value business records are kept and short term value information is routinely destroyed.

Establishing this strategic, managed approach to information retention in our organisations is necessary to help manage spiralling ICT costs, avoid the impacts of the data storage bubble and to ensure organisations have the core information they need now and into the future.

Not many cloud projects assess information requirements and risks, and talking to people you discover that information management is seldom explicitly addressed in cloud contracts.

## MANAGING RISK WHEN SELECTING CLOUD-BASED BUSINESS ARRANGEMENTS

Another key area where our organisations need the expertise of records and information management professionals is in the selection of cloud-based business arrangements. The cloud offers fantastic business opportunities but it can pose information management risks which are not widely understood.

The key information management risks that will particularly impact on cloud arrangements are:

- information longevity – business systems are not designed to keep your information for the medium to long term and the cloud isn't either
- information proliferation – information volumes need to be managed, particularly in cloud frameworks, to prevent significant cost blowouts.

These key risks already affect information in just about every organisation today. They are slow burn issues, however, that in traditional business frameworks take a number of years to impact on corporate processes, accountabilities and bottom lines.

Cloud frameworks however will bring these issues to the fore. Cloud-based systems will either:

- rapidly exacerbate these existing information management issues and cause them to impact corporate operations or the corporate bottom line in the short term, or
- provide the impetus to proactively address these challenges and resolve them before they present a corporate risk.

The majority of business systems today are not configured to make and keep the information that business will need in the medium to long term.

Systems are necessarily designed to meet immediate project needs and requirements and for, speed and efficiency purposes, are often based on non redundancy and data overwrite principles.

But a significant core of business information will have a business and legal lifespan that is greater than the system it is part of. However this longevity is seldom proactively planned for and consequently organisations are often left with complex legacy system and data management problems as a result of inevitable technology change.

The challenge of the cloud is harmonising these needs for daily efficiencies with an organisation's parallel needs for longer term efficiencies, strategic insights, reporting requirements and accountabilities.

There really is nothing new under the cloud. The cloud just emphasises that we as records and information management professionals need to be smart and strategic and proactive with our information management plans. We can't wait and deal with a remnant and complex legacy, we need to help our organisations make long term, proactive and strategic information-related decisions before they deploy cloud frameworks.

Resolving these types of risks and issues may be more complex with the cloud because, like the majority of business systems, the majority of service or application offerings in the cloud have not been developed with long term information management principles in mind.

Information export and portability are not native functionality in some cloud offerings and the commercially driven lack of standardisation between cloud services can also inhibit data movement and consequently data maintenance.

Because cloud service and application offerings often tend to have a short-term project focus, they are not mature in their ability to handle more long term information. We see this lack of maturity in:

- blanket retention rules in some cloud systems
- blanket purging rules
- lack of tools or capacity for data partitioning, segmenting, tailored purging and retention.

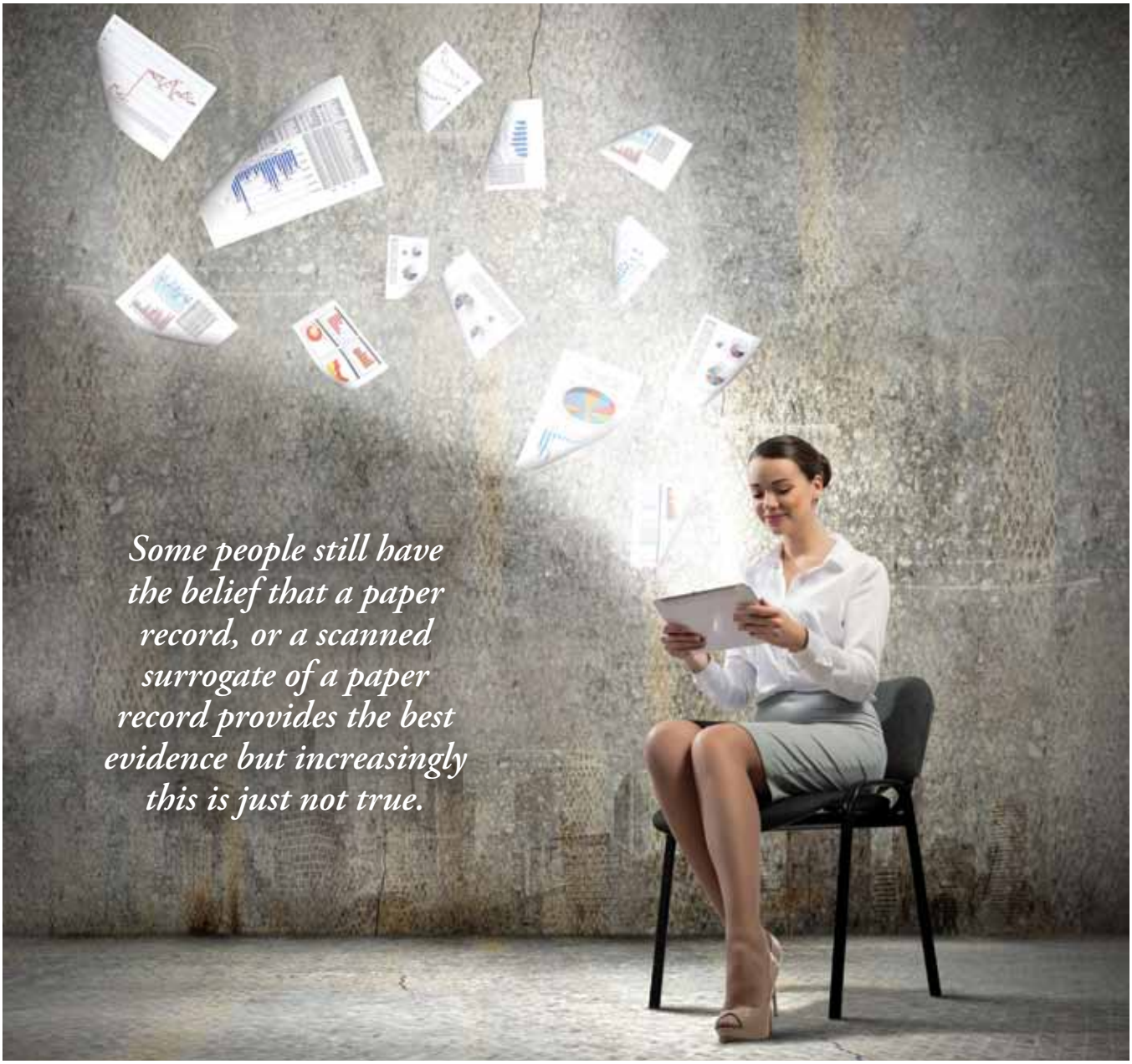
Many cloud systems can treat data with a one size fits all approach, but this does not fit the nature of the information that government is generating, where some data barely needs to be retained a day and other data has a variety of legislative requirements to be kept for 50+ years.

## KEY PLANNING QUESTIONS TO ASK

According to information governance expert Barclay T Blair, key planning questions to ask when considering different cloud offerings to address these issues include:

- what capability does your cloud provider offer for exporting data from its services? What types of metadata are preserved? What are the costs and timeframes?
- what standards does your cloud provider adhere to, and are those standards sufficient to address your data portability requirements?[2]

Asking these types of questions will help you to mitigate and manage maturity issues and develop plans for how you will sustain your information that needs to be kept longer term.



## THINK STRATEGICALLY

The next key risk foregrounded by the cloud is the management of information abundance.

As discussed above, we hear a lot today about information surviving forever, about storage being cheap, about technical capacities to keep everything we create. Each of these in fact is a myth and each day organisations are exposing themselves to very long term risks and cost liabilities because of these inaccurate assumptions.

With the cloud you must think strategically about your digital information. Not foregrounding these issues and considering them up front is going to create substantial and unsustainable legacy issues in the future so they must be addressed.

This is particularly the case with the cloud, where all excess data is going to cost your organisation large amounts of money to maintain each and every year. So, as records and information managers, we need to help our organisations to be strategic. We need to talk to our business, project and ICT colleagues and collectively identify what corporate records need to be kept, and what can be thrown away and build these requirements into your cloud frameworks. We should not inhibit or prevent business moves to the cloud, but we can genuinely help to manage these transitions to ways that protect and secure key corporate information assets.

A common example where you will be able to demonstrate your value is in the management of cloud-based email.

Many organisations are looking to move email to the cloud for a 'quick win'. As you may guess from reading everything above, the risk when moving email to the cloud is that you are moving a high risk, multi transactional, multi-agent, poorly managed and massive dataset to a cloud environment where you will need to pay for its ongoing storage.

Cloud solutions in and of themselves are therefore not a solution for email. Unless you have well managed corporate email, or business rules that require staff to actively manage their email, cloud email systems are simply a means of moving an existing problem off site.

Many cloud email systems can also deploy a rolling deletion policy which will, for example, auto delete all emails after two years. The risk here is that standard retention rules will give equal weighting to an email about a birthday cake in the tea room and an email about a $10 trillion business contract.

Organisations can of course deploy cloud-based email systems, but they do need to do this strategically. You can help your organisation by putting in place strategies to ensure you can keep what you need to keep and routinely destroy the information you no longer require. Email is a high risk business system and unless a move to the cloud is handled well, these risks can be magnified and become exceptionally costly in the medium to longer term.

By assessing your organisation's information needs and risks when moving to the cloud, you can identify and implement genuine management strategies that will mitigate these risks and maximise your business potential.


### ABOUT THE AUTHOR

Kate Cumming is a Senior Project Officer in the Government Recordkeeping program of State Records NSW where she works with NSW Government agencies on a wide range of digital business and recordkeeping issues. Kate holds a PhD in Information Management and Systems from Monash University. She is a co-founder of the recordkeeping and archives discussion group the Recordkeeping Roundtable and regularly blogs on IM issues at http://futureproof.records.nsw.gov.au. Together with colleague Janet Knight, Kate is a previous winner of the *iQ Article of the Year Award* and together with colleagues in the State Records Digital Recordkeeping Team, was shortlisted in 2012 for the J Eddis Linton Award for Most Outstanding Team.


## THE STEPS TO TAKE

To ensure that information risks do not ultimately outweigh the short term business efficiencies of moving to the cloud you need to do the following:

- **Plan for the cloud** – take the time to do it well.
- **Collaborate** – bring ICT, IM, records and business staff together. Their shared insights will help you to develop the best cloud solution.
- **Assess IM and ICT and business risks** – information is a critical corporate resource in the short and longer term, so make sure any potential short and long term risks to it are mitigated.
- **Select systems appropriately** – choose systems that meet all your business needs.
- **Build IM into cloud contracts** – if warranted, make sure that longevity and volume management are appropriately covered in contractual statements.
- **Monitor and improve** – product maturity and corporate awareness of the cloud are still evolving so always take the time to assess and improve your practice.
- **Educate** – use the lessons from cloud to improve information management and recordkeeping practices across your organisation.

As records and information management professionals, we are so equipped to help our organisations transition to powerful, strategic and effective digital business frameworks. So now is an incredibly exciting time for us to demonstrate our value and potential in our increasingly digital world.

By helping to transition away from paper mindsets, from information proliferation to strategic information management and into planned cloud arrangements, we can fundamentally help to shape positive futures for our organisations. ❖

For more information on digital information challenges and opportunities, see State Records' Future Proof blog at http://futureproof.records.nsw.gov.au/

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# INFORMATION GOVERNANCE AS A SERVICE

In order to remain competitive and maintain costs, organisations must consider information governance as a service – ie, the ability to deploy governance capabilities in the cloud as managed services.

By **Pierre Van Beneden**

Software as a Service (SaaS), sometimes referred to as 'on-demand software' supplied by independent software providers or 'Application-Service-Providers' (ASPs), is a software delivery model in which software is hosted in the cloud. SaaS is typically accessed by authorised users using a web browser and generally priced using a subscription fee, most commonly a monthly or an annual fee.

The adoption of cloud technology has rapidly increased throughout the enterprise in the last two years. Forrester predicts that the market for cloud computing will grow from $41 billion to $241 billion by 2020. The range of benefits offered by using cloud services and the maturity of cloud vendors is driving adoption at the global level. More and more companies are using cloud technologies and managed services to accelerate business initiatives, allowing them to be more agile and flexible, and reduce costs.

This is also true for information governance technologies. The newest trend emerging is information governance as a service – the ability to deploy governance capabilities in the cloud as managed services. The days of proprietary governance capabilities that are tied to silo proprietary applications or systems are coming to an end.

In order to remain competitive and maintain costs, organisations must consider information governance as a service. Technologies with a flexible central policy engine, capable of managing the challenges of complex, federated governance environments are going to be the ones that enable organisations to make the most strategic use of information. These technologies have an enforcement model not tied to a specific store or repository of assets, but leverage standards to enable automatic enforcement across all systems, repositories, applications and platforms.

## INFORMATION GOVERNANCE AS A SERVICE IS ESSENTIAL

Organisations have the opportunity to tame inadequately governed information assets – stored in content management systems, data warehouses, physical warehouses, desktops, file shares, back-up archives, mobile devices, cloud services,

*story snapshot*

Cloud computing, mobile communications, social networking and strategic use of information are reshaping enterprises and entire industries.

Combined, they are changing the nature of business and even how individuals think of business, finance and risk.

Organisations must consider cloud deployments for information governance in order to stay ahead of competitors.


Figure 1. Information governance with a set of managed services enables the strategic use of information across business-critical applications in the complex IT infrastructure.

and even on employees' personal computers. However, this requires a fresh approach and new technologies in order to address the challenges arising from the growing volume and format of information being generated within the traditional IT infrastructure as well as within cloud-based storage systems and repositories.

This is not a pipe dream, nor should it be a long-term vision for the distant future. Some organisations already do this because they see the competitive edge it will bring. In a short time, they have already realised many of the benefits of defining information governance policies with a cloud-based platform – including rapid and predictable implementation, user-friendly experience, minimal IT infrastructure support, ease of leveraging cloud-based data, and automatic, seamless upgrades.

## START YOUR INFORMATION GOVERNANCE PROGRAM FASTER

Information governance programs are sometimes stalled in the organisation because it requires dedicated IT resources and infrastructure. This often competes with other high priority IT projects such as social medial and mobile. By deploying information governance as a service, it enables the organisation to access information governance capabilities, deployed in the cloud and billed on a subscription basis. Information governance as a service eliminates dependence on IT resources and enables consistent governance across all on-premise and cloud-based repositories.

Industry analysts advise information governance programs begin with policy definition. Policies reflect business and jurisdictional requirements so that information is automatically managed and properly used. There is no longer a need to have policies spread across the organisation. A single policy engine must support all of the organisation's governance controls – retention, disposition, legal hold, data privacy, and security. Companies are able to quickly create a digital hub of all governance policies across jurisdictions and information stores, including:

- desktops and shared drives
- enterprise content management (ECM) systems
- databases and data warehouses
- email systems
- cloud-based repositories
- social media platforms
- physical warehouses.

But policy management isn't a one-time occurrence. Policies constantly change due to new business requirements, regulatory demands, rising costs, and high-profile litigation. Organisations stay competitive by enabling the quick and easy deployment of updated policies using only a standard Web browser. There is no prior IT infrastructure acquisition or setup required and it allows organisations to realise the project as an operating expenditure (opex) as opposed to a capital expense (capex).

Also with information governance as a service, companies finally have a repeatable process and platform to help update, validate, deploy and enforce policies. Policy changes are systematically distributed to content repositories without negatively impacting users and operations. The companies who do this best are more competitive and successful.

## REDUCE STORAGE COSTS

There have been countless case studies on how the implementation of cloud technologies revealed significant savings for many businesses and IT teams. Since companies rely on a third party provider with proven infrastructure and technology, the deployment of the solution becomes more predictable and less risky. Implementation time is reduced dramatically without the IT requirements and ongoing maintenance.

In addition to a fast and predictable deployment, information governance as a service reduces storage costs with systematic defensible disposition. While it is true that basic storage costs have gone down over the years, the estimated cost of a managed terabyte of data is a shocking range of $14,000 to $17,000. This cost includes the maintenance of the storage and the cost of bringing it within the company firewall, and so on. This is not cheap. The more information that companies defensibly delete, the more they will dramatically reduce storage costs. Further, in the unfortunate event of e-discovery, there will be less content for the lawyers to sift through, saving significant time and legal fees.

## ENABLE LOW-COST CLOUD STORAGE TO BE USED AS A 'SYSTEM OF RECORDS'

Cloud storage is usually available at a very affordable price and is often a preferred way to store high volumes of data. Sometimes the content is already in the cloud and was originally created by a cloud-based collaboration system, social media applications or by a cloud-based ECM system. In other cases, use of the cloud means that an organisation's content has to leave the confines of the internal corporate network to be relocated to the cloud.

These cloud storage systems are usually billed on a per usage basis and are dynamically extensible by the customer according to his storage needs. They are usually very affordable and represent a real cost-effective alternative for storing terabytes of archives which need to be kept for several decades for compliance reasons, but are not frequently accessed by the business end-users any more.

The key here is most of the cloud-based storage solutions don't offer core lifecycle and records management capabilities. As content is migrated to these new generation of cloud content object stores, information governance must be applied in an automated, audited, cost-effective and non-intrusive manner.

## ADDING TO IT'S ARSENAL

When the IT services related to information governance programs are freed up, policies are managed and enforced consistently across all repositories and jurisdictions. This allows IT resources to be more strategically deployed. They are able to quickly respond to business and legal mandates with minimal resources and investment. Manual and redundant tasks are eliminated by automatically governing information throughout its lifecycle across the enterprise. The management of business information is simplified for the entire organisation, and IT is freed to improve service to business units by optimising storage media and enterprise archiving solutions. This leaves IT with the ability to be more strategic with corporate information and infrastructure solutions. Their role in the organisation is enhanced because they will spend less time on manual and maintenance tasks, and more time improving business processes.

## INNOVATE FOR A COMPETITIVE ADVANTAGE

Significant innovation continues in the field of information management technologies and practices. The key factors driving this innovation are the explosion in the volume, velocity and variety of information, and the huge amount of value – and potential liability – locked inside all this ungoverned and underused information. These changes in technology and information growth are demanding that information management technologies and disciplines continue to challenge traditional assumptions.

According to Gartner, cloud computing, mobile communications, social networking and strategic use of information (identified as the Nexus of Forces) are reshaping enterprises and entire industries. Combined, they are changing the nature of business and even how individuals think of business, finance and risk. It is imperative that organisations consider cloud deployments for information governance in order to stay ahead of competitors. ❖

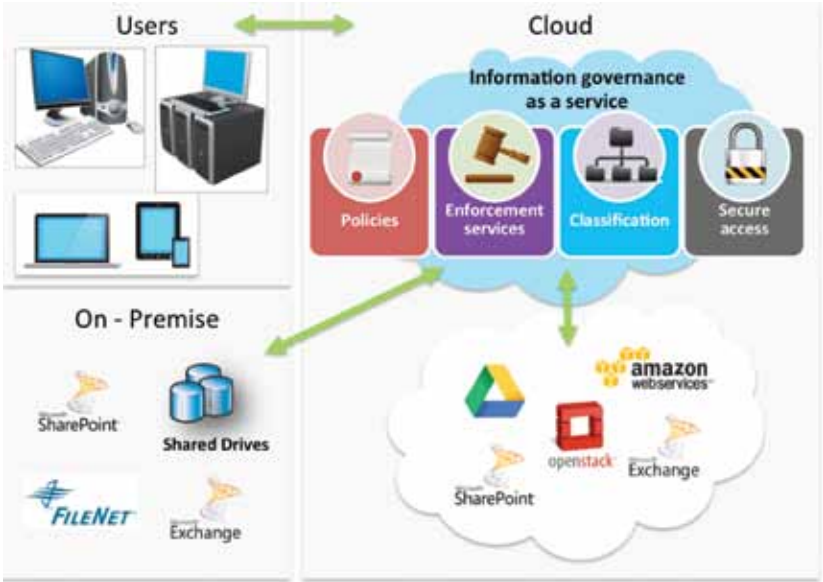



Figure 2. As opposed to traditional records management systems, information governance as a service is repository-agnostic with enhanced in-place governance controls.


### ABOUT THE AUTHOR

Pierre Van Beneden, CEO, brings over 25 years' experience driving growth at software companies through leadership and a results-focused approach. Prior to joining RSD, Pierre was VP EMEA for Adobe Systems Inc. From 1995 to 2001, Van Beneden was with Lotus Development Corporation where he served in a variety of executive roles. Prior to his time with Lotus, Mr Van Beneden spent almost a decade at Oracle Corporation driving global growth strategies.

# Folders are not the solution, they are the problem

Rather than assuming that folders are central to any information design, here's a challenge – folders can be the cause of many problems. Using clear thinking, a faceted[1] (component-based) approach and metadata will simplify how to store and retrieve documents. The focus is on digital systems, but the principles can apply to paper-based documents. This article describes a number of approaches to reducing our 'folders/hierarchy-first' paradigm (see story snapshot).

By **Trish O'Kane**

story snapshot

1. Why do we have a love affair with folders?
2. 'Ready, fire, aim'. Rethinking what we are trying to achieve.
3. Faceted (component-based) analysis – identify the components, discard some, use some.
**+ Case study: Legal interpretation cases**
4. Metadata-first approaches, using a SharePoint IT project as an example implementation.
**+ Case study: Building establishment of a trustworthy and authoritative repository for one of the largest IT projects in Australasia.**

## 1. WHY DO WE HAVE A LOVE AFFAIR WITH FOLDERS?

**1. Behavioural**
- We're used to them – it's how Windows and Outlook work.
- They come out of a familiar paper paradigm – paper inside cardboard inside boxes
- 'Ready, fire, aim.' Solution first. Now what was the problem?
- We don't trust each other, so we set up fiefdoms, see Personal Control, below.

**2. Personal control (it's about 'me')**
- I can create folders, I can move stuff around, and that suits me now.
- I can put it 'there', and if I can't remember where 'there' was, I can create several places and save 'it' in some of 'them'.
- I can control 'my folders', 'my stuff', I'm not worried about what happens when leave.

**3. Belief systems – otherwise known as 'the Triumph of Hope Over Experience'**
- Offer the prospect of certainty. 'It will be in here' or, if not, it will almost certainly be in there, or there, or there…'
- Look precise, exact, fixed, reliable, hierarchical, ordered, but can end up as: 'Bob's stuff /New/Old/ General/Miscellaneous'.

**4. Technical**
- It's all we've got; we don't have a database/EDRMS/ECM. Also known as 'if your only solution is a hammer, everything looks like a nail'.
- We do have technology and it includes (drum roll…) folders! See Behavioural, left.

## 2. 'READY, FIRE, AIM'. RETHINKING WHAT WE ARE TRYING TO ACHIEVE

What are we trying to achieve with creating a folder/classification structure? Often we are trying to achieve *too much*, for different audiences and purposes, and in the process we fail.

| WE ARE TRYING TO | ASSUMPTIONS | THINK AGAIN |
|---|---|---|
| Build folders | Build first, analysis later | • What are we trying to achieve?<br>• What information do we need to incorporate into a hierarchy?<br>• What is unnecessary complexity? (see Faceted (component) analysis, below) |
| Create reliable **path**ways for people or systems to save and retrieve information | The emphasis is on 'path' rather than '**way**' | Navigation is not always the best and certainly not the only way<br>What else would improve **retrieval**? |
| Cluster information so that not too much scrolling is required | • Assumes that scrolling is how people will navigate<br>• Need to keep building ever-lower folders | We can set up shortcuts to create our own views<br>We can use search, where there is reliable information in<br>• A folder name<br>• A document name<br>• Metadata<br>• Text in a document (eg, in documents generated from templates or by other systems) |
| Be compatible with access permissions and keep groups away from each other | Assumes that the organisation knows who should read/edit what | • Simplify access models<br>• Align with other systems<br>• Challenge the need for restrictions |
| Build in the context of Function and activity | Assumes that this has to be obvious to everyone | • Processes matter to people, start there<br>• Map what you build to Functions and Activities, don't make users navigate through this |
| Apply Disposal Rules | Assumes we know enough | • Separate admin from deliverables<br>• Use rules based on context, don't ask users to apply disposal |
| Use it as a reporting tool | !!! Really??? | • Use existing reporting systems, or build a register |
| Cross-reference | That this is robust – in fact it is fragile | • Use existing reporting systems, or build a register, using identifiers rather than just links |
| Build irrelevant layers eg,<br>• Which team<br>• Where that team was<br>• Put system development and maintenance under the governance layers of Program/ Project<br>• Region then Country<br>• Location then Customer | • We have to include context that is already in another system<br>• We have to express relationships between entities<br>• Everyone understands the groupings | • If another system knows the detail, leave it out of the folder structure<br>• Flatten lists, use type-ahead or search or favourites<br>• Relationships are complex and fickle, especially time-based relationships. Work to eliminate them from a folder structure |

## 3. FACETED (COMPONENT) ANALYSIS

Classically we start by analysing what the organisation does, and what information it creates or receives in its processes. Then we start arranging. However, we should also analyse the relevant components (facets) of what is being done, before we pummel them into a structure.

### CASE STUDY: A legal group that does technical rulings (interpretations) of legislation

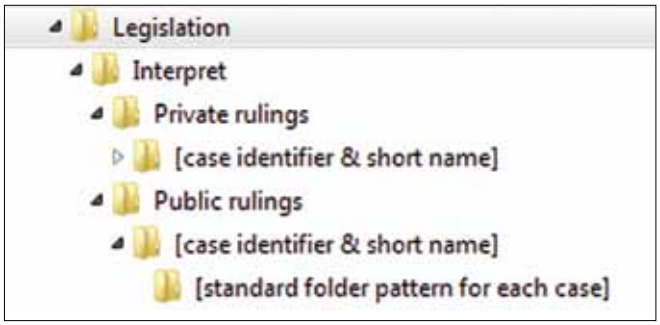
This group within a large organisation has several teams. Their work is case-based, where each interpretation is a case. They have a case management system (CMS).

Facet (Component Analysis)

| COMPONENTS | WHERE TO USE | | |
|---|---|---|---|
| | FOLDER | DOCUMENT | CMS OR REGISTER |
| Two types of cases:<br>• Private ruling – identifies a person/organisation<br>• Public Ruling – doesn't identify a person/organisation | Y | _ | Y |
| Case identifiers (created by case management system) | Y | Y | Y |
| Case names (in case management system) | Y | _ | Y |
| When the case started and completed | – | _ | Y |
| Standardised sub-folder pattern for every case | Y | _ | _ |
| Sub-types of cases | _ | _ | Y |
| In the group, which team/person is working on a case | _ | _ | Y |
| Team/person location | _ | _ | _ |
| Area of law | – | – | Y |
| Relationship between cases | – | – | Y |
| Person or organisation for private rulings | – | – | Y |
| Document type | – | Y | – |
| Date of document | – | Y | – |
| Version or status of document | – | Y | – |

Note: This is only for casework. Team administration is handled separately.

The design has many fewer levels than previous attempts and aligns with the Case Management System (CMS).




### Implementation

- **Security:** they decided to trust each other, all teams can access every case, as in the CMS.
- **Template:** There is one templated set of folders for each case, applies to both types.
- **Big bucket:** There are many cases, people set up favourites for their current cases.
- **Retrieve:** To find a case, search by case identifier or short name, both in the CMS.
- **Storage:** Inactive cases can be hidden/moved to tiered storage. The CMS knows which are inactive.
- **Migration:** The teams tidied up existing case folders in existing folders, refining the sub-folder pattern, then migrated those cases into the new structure. They did this gradually over about three months.
- **Documents**
  - All documents have a naming convention independent of the containing folder.
  - Case identifiers are included so that favourites/shortcuts/links still make sense.
  - It's obvious which document is the right one before you open it.

### Outcome

The group finds the simplicity and predictability very valuable and they patrol it themselves. Teams have adapted quickly to a case-first rather than a team-first approach.

## 4. METADATA-FIRST APPROACHES

Where we have more tools than just folders or hierarchies, we have more choices. We can eliminate some hierarchical levels. We can inherit, use and display metadata independently of folder and document names. In many ECM/EDRMS this *should* enable us to use fewer layers of classification, unless we get stuck in the folder paradigm and keep building deep hierarchies.

SharePoint offers Sites, Libraries, Document Sets[2], and Folders[3] amongst other tools. So the hierarchy paradigm starts to lure us in again. We must keep thinking and simplifying. Understanding Document Sets, Content types, SharePoint Lists and metadata schemas (whether within or external to SharePoint) helps us to use SharePoint with elegance and efficiency and assists clever integration with third party solutions.

What does 'big bucket' mean in this context? Providing that we have reliable metadata that can easily be filtered, hundreds or even thousands of documents can be stored in one 'bucket', eg, in a SharePoint Library. All manageable, all easily retrievable, as this example demonstrates.

### CASE STUDY: An authoritative repository for a large IT project

In 2012, a large program consolidated IT systems in a major organisation. The program needed a single authoritative repository for key program documents, to:

- create an authoritative record of a significant program
- facilitate decision-making and meet audit requirements
- create a resource for future re-use.

A lot was already known about what deliverables must be captured, because the project:

- had very strong governance
- used well-established project management tools
- had well-defined deliverables.

This meant that we could focus on how to describe and arrange information.

### Approach

The version of SharePoint was 2007, and this was the approach:

- Use 'Out Of The Box' (OOTB) functionality to enable future migrations – with just a little bit of Java scripting to help users save or migrate documents.
- Use content types to implement standardised metadata.
- Use columns and views within each library, to display metadata and enable easy filtering.

### Simple site structure

The site structure is very simple, with a few libraries as 'big buckets' for hundreds of documents. The library structure was built to suit the BAU teams who inherited the work of the project. The technical libraries are built around system groupings, not project work streams. Project work streams show as columns within each library.

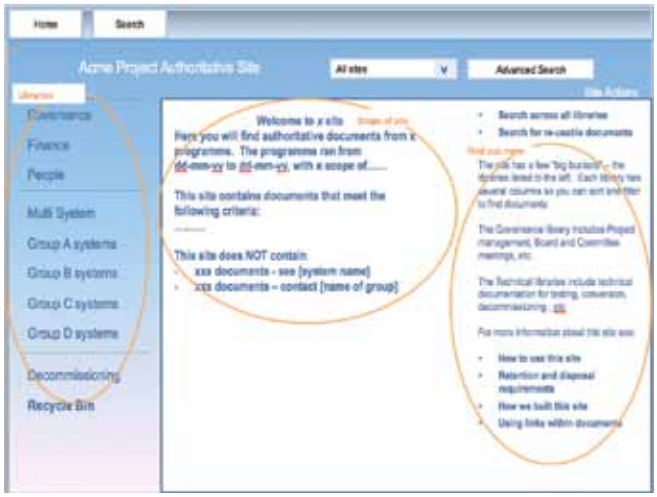



Figure 1: Site page

Behind the scenes, tags (metadata) were developed, eg:

- **For any library:** Workstream, Document type, Status
- **For technical libraries:** System, Testing Phase
- **For governance library:** Name of Committee, Date of Meeting

- Controlled lists were developed to populate each tag – some tags permitted multiple values, so that a document can be associated more than one system or project milestone
- Content types were used to apply appropriate tags to relevant documents
- System-testing documents were tagged with the relevant system(s)
- End-to-End testing documents are system-independent

### Filter to find

For example, the Multi System library holds more than 200 documents that apply across multiple systems. Filtering on columns means there are several ways to 'slice and dice' to find documents with precision. Filtering on:

- Work stream = 'Enterprise Architecture' and
- Document Type = 'SAD - Solution Architecture Document'

returns just two documents, which is the correct result. Document name? Not that important.


Figure 2: Multi-system library

The Governance library contains all meeting documents created by all committee. Each document is tagged with 'Name of Committee' and 'Date of Meeting', Document Type etc. Importantly, meeting documents can also be found independently of Committee eg, just by 'Document Type'.

### Eliminate false dilemmas

In the technical libraries we didn't have to choose between a hierarchy based on Workstream or a hierarchy based on System, they are columns in a list. Filter on either, filter on both, add on other filters, whatever you feel like at the time.

### Outcomes

The result was a revelation to folder-lovers and is proving to be a prototype of how to design document libraries. Typical reactions: 'this is beautiful' and 'this is how we should be working'.

The design meets project audit requirements, and it is easy to apply retention and disposal rules in this metadata-rich environment.

### What was most challenging?

- **Simplifying the list of document types**. Sometimes we simplified and aggregated document types so that filtering would bring back useful documents and you wouldn't miss something because it might be a similar document type. The Library, Workstream and Content type usually provided the other context needed.

| DOCUMENT TYPE | USE INSTEAD OF |
|---|---|
| Plan or strategy | • Decommissioning Plan<br>• Decommissioning Strategy<br>• Detailed Employment Plan<br>• Employment Plan<br>• Environment Strategy<br>• Programme Test Strategy |

Figure 3: Document type example

- **Reducing the amount of metadata people thought they needed**. As the libraries developed, people realised that they could filter down to the documents they wanted with about four items of metadata, plus a couple more that the governance program needed.

### What would we change?

One technical library could have held all technical documentation. However, the creation of specialised technical libraries was a solution that users liked, and there were only six technical libraries with very clear separation of content.

### What was reinforced for us?

A picture is worth a thousand words – when people could see the developing site they understood quickly, told us what metadata they (really) wanted, and got on board.

Having big buckets prevents the 'hide and seek' effect where a document could be in several places. In this approach it is in the bucket, just fish it out by filtering on the metadata columns.

Document title/name isn't important for finding documents, it was useful for creators to recognise their own documents, but others relied on Content type, Document type, Workstream, System name, etc.

There were some funny conversations.

- **Me:** There won't be any folders, just libraries.' Project member: 'Oh, well I'll need my own library'. Or not.
- **Project member:** 'My teams existing folders work really well, I'll show you. Click down here for x documents – oh, someone must have moved them. Okay, they'll be here – oh, some of them are but not the latest ones. Um….'

### How long did it take?

This site took about three months with two people working part time. For another two sites it took only about one week to build both, because the approach can be templated. People migrated their key deliverables in about half a day per person, or less. ❖

For more information and a presentation from the author on this topic, go to http://www.knoware.co.nz/papers

## Bibliography


1 Facet Analytical Theory – UCL. www.ucl.ac.uk/fatks/fat.htm
2 'Document sets' are smart folders that can inherit and control metadata and pass it on to documents, integrate with workflows and provide context for rules. They suit case/job-based sets of documents that are linked to a process that starts and completes. Lists in SharePoint also provide metadata and integrate with workflows
3 Folders are hierarchical passive containers, just like in eg, Windows



### ABOUT THE AUTHOR

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# RECORDS MANAGEMENT: BACK TO THE FUTURE

Whilst it is exciting to be at the forefront of thinking and involved in the hot topics, RIM professionals risk distraction from solving the problems of the here and now to provide the very platform they need to tackle the issues of big data, cloud computing and enterprise search.

By **Michelle Linton** & **Kevin Dwyer**

Records and information managers are assailed with big picture thinking at present. Faced with an avalanche of information looming from the future, planning is currently consumed and frequently overwhelmed with making decisions on managing big data. Cloud computing, enterprise search and data-based decision making are the themes of workshops, conferences and papers.

The need to research, consult and set direction for the big picture is self-evident. Past experience informs us that failure to forward-think leads to poor outcomes. Organisations that failed to read the future litter the landscape. Think Kodak and digital photography, and IBM's failure to change to a business model that could compete in the changing landscape of PC production. However, the overwhelming evidence is that most records and information management (RIM) teams are struggling to manage the current requirements and needs of recordkeeping – ie, just ensuring all records are captured in digital format or born digital and able to be found. Capture, titling metadata and security are still poor.

It is our observation that whilst it is exciting to be at the forefront of thinking and be involved in the hot topics, RIM professionals risk distraction from solving the problems of the here and now to provide the very platform they need to tackle the issues of big data, cloud computing and enterprise search.

## PREPARE FOR THE FUTURE: LEARN THE LESSONS OF TODAY

Whilst we all recognise the importance of learning the lessons from the past in dealing with the future, it is not a lesson easily learned by the passionate and optimistic amongst us. Nonetheless, here are three lessons, which utilised wisely, will both lay the platform for the future by concentrating on the present and ensure future opportunities are approached in a manner which begets success.

### Get real on time

Our observations are that RIM personnel constantly underestimate the time required to plan and implement in a manner resulting in high user adoption.

For instance, how long does it take to create a vital records plan? The time it actually takes to write the plan? Certainly. The time it takes to consult with business units? Of course. But, there is much more to be considered and we usually miss it.

Estimation of the time it takes to complete tasks involving multiple stakeholders is a major area of failure for people in any industry or role. Even experienced practitioners constantly underestimate the time necessary to perform the required tasks in a project. Frequently this is due to pressure from above. We aim to please and deliver to ourselves and our managers ASAP. Forefront in our minds is the ingrained human tendency to say yes. "Yes I can have that done quickly" makes everyone happy at the time of utterance. It's a temporary happiness only. The reality unfortunately, is a failure to achieve unrealistic time frames resulting in everyone feeling let down. The result is criticism from all impacted and the loss of credibility for the future. Big data may soon become small data and 'my data'.

Time comes in two variations – actual and elapsed. Actual time is that consumed by the activity of completing a task. People are generally reasonably good at estimating this. The more experienced people are, the better they estimate.

For example, a meeting can be limited to a set time span. Or we may know on average it takes an hour to draft an FAQ. However, there is still a tendency to underestimate and not make allowances for worst case. Adding an extra 25% of time as a contingency is a wise precaution. If we don't, managers will learn to identify the worst culprits for underestimating in their team and add a multiplier to any activity, anyway.

Elapsed time is the major problem for people. The estimate for elapsed time is consistently totally removed from reality. Let me give you two real life examples:

- A shared drive closure project set with a completion date in three months' time, upon investigation, actually required three months elapsed time allowance just to achieve endorsement to proceed from all tiers of management.
- A vital records project agreed with the Executive to be completed in six months actually required, upon investigation, 24 months of elapsed time with the then currently available resources.

The actual working time in both projects was minimal. However, both teams fell into the trap of thinking that if they themselves worked really hard they could achieve the timeframes, but made no allowance for the time required by external parties to provide responses or take actions, or the reality of completing a project whilst continuing business as usual.

*Never have a project longer than 90 days. Make that another project.*

Most elements of our work require an elapsed time estimate not just a working time estimate. For example, we write a report, but our manager must approve it before that task is complete. That could mean the manager edits it and returns it to us for further input. That creates a second round of approval. If the manager takes a week per review then two weeks have disappeared in a flash. The simple report, which took half a day to write, takes three weeks to be published. Make the allowance therefore of three weeks, and when a senior manager challenges the estimate explain the factors contributing to that reality. This provides the opportunity for the person responsible for the lengthy duration to either change their practice or accept the reality.

It can be more difficult estimating elapsed time when working on RIM projects with business units detached from the RIM business unit. We cannot control the volume of business as usual work that distracts people from establishing file plans or improving a process through use of the EDRMS. We can, however, determine if there are critical drivers that will constrain times and motivate people to complete required tasks, such as an internal audit. And we can expect that if that is the driver of a project for the business unit, then the project will extend to that deadline, not any preferred earlier deadline we'd prefer to set.

To overcome these issues, make constraining elapsed time easier by setting up actions that move a project along. Break the projects into small stages instead of one long stage that drags on. Never have a project longer than 90 days. Make that another project. Succeed and celebrate, and then move on to the next project. Sure, we'll still be thinking of the big picture, but in manageable and estimable chunks (think agile project planning).

Provide people with tools or a framework that makes decision making easy. This might be as simple as drafting

⇒


three different options of folder structure instead of one for instance. That way the reviewers can easily select their preferred option. With a single option there is a high likelihood of rejection and of us being sent back to the drawing board with little direction and greater loss of project time.

Time is ephemeral. No sooner do we estimate the time it takes to do something and it seems the time we estimated has already past. People are notorious for underestimating the time it takes to do something. In the world of the future, projects will be more complex. The increase in complexity from paper to digital will seem child's play compared with the increase from digital records to fully integrated knowledge management systems.

**Deliver on small projects**

Big picture thinking makes life complicated. We are working towards a perfect solution in one giant leap forward in an environment with many unknowns. It's a sure step to disappointment and failure. We should lower our expectations and aim for small steps of continuous improvement. Rome was not built in a day.

Break large projects (anything that is likely to extend beyond 90 days to complete) into phases, and release these phases as projects in their own right, with a clear start and finish. There are many success stories out there in the world of record keeping, and the consistent practice

## ABOUT THE AUTHORS

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Michelle is a Learning & Development professional with 24 years' experience in the planning, design and delivery of training programs. Michelle has developed and delivered innovative, outcome focused EDRMS training for over 30 government and private organisations since 2005. Michelle's pragmatic approach to learning strategies leading to application adoption has been enthusiastically welcomed by the industry, and she is a regular speaker at RIM events and contributor to industry magazines. Linked Training is the training partner in the REX project which was awarded the J.Eddis Linton Award for Excellence – Most outstanding group in 2010.

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**Kevin Dwyer, Director, Change Factory**

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demonstrated by those records managers is one of taking small steps, whilst always having the end goal in sight.

For instance a common project is SAP integration with HP TRIM to improve management of finance records. System integration requires software development and a business case, which take time to acquire and achieve. And once achieved the system owner expects instant action from records and instant outcomes from the project. Addressed in phases the records unit can operate independently of the system owner by creating three phases:

- Phase 1 ensures all business units register digital invoices in the EDRMS and workflow them to Finance. This will require file planning, quality assurance, workflow training and may include a new record type. Stop and applaud your achievement here.
- Phase 2 has Finance opening the digital record and copying the required data to SAP, removing the current practice of creating of paper records. When this is running smoothly applaud again.
- Integration occurs at Phase 3. It may be delayed due to the business case, but when in the meantime the organisation has improved record keeping, met compliance and reduced physical storage. And when Finance is ready to proceed to Phase 3 the level of change required for all involved is minimal.

The RIM unit earns the respect of other units with this approach by meeting expectations and delivering results on each 'small' project, and place less imposition on the business. Your own team will also be able to measure progress and feel the sweet taste of success.

### Share industry experience

Don't reinvent the wheel. The wheel was invented a very long time ago and the improvements over time have been slow and incremental. We leave any improvements nowadays to experienced engineers and select from what is available.

Records policies, procedures, FAQ sheets, Ministerial processes, etc. have all been created before. Training materials, system configuration, BCS models, etc. are all available for purchase or through collaboration. Yet records managers continue to devote inordinate amounts of time to reinventing them pretty much from scratch for their organisation. There are great resources available from the State and National Archives to commence with.

Certainly each organisation needs to contextualise to our organisation's unique language and environment, but editing is not only easier than inventing, we'll also be able to apply the lessons learnt and be more successful than our predecessor.

We must be certain to invest our time in the activities that make the most impact on volume and quality of record keeping; leading and managing our staff or engaging with business unit managers and facilitating their path to leading recordkeeping in their units. This is the type of activity where we can take advice from others, but they can't replicate the value we bring to an organisation. Records management is more an art than a science.

We can all help with this by sharing at workshops and conferences, and in papers by being sure we paint a picture from which people can learn rather than by promoting our exploits. There is a tendency to promote, in papers and conferences certain actions over others and give a false impression of experience and outcomes. The impact of that may well be leading people off on a wild goose chase. For example, simply saying that we produced a good policy and that then drove adoption of record keeping in our organisation when the truth is that it required three drafts before approval and we engaged two vendors to plan and implement the program may lead people to believe their own journey will be easy. They may attempt to follow what they believe is the same path, but it leads to failure. We must be real and share all our learnings including elements which failed or took much more effort than appears on the surface.

## THE FUTURE BECKONS

The future of records and information management is exciting. Big data means that chief financial officers and chief executive officers are now 'getting' the idea that information is an asset. If they do indeed get that concept, then they may well pay attention to the security, accessibility and reliability of information. However, we do not want the situation unfolding where, when finally we are getting the attention to our profession we deserve, we have that interest dissipated because we did not learn the lessons of the here and now. ❖

# 50 shades of record keeping

We've all heard the stories about the early days of recordkeeping, papyrus scrolls, rock carvings and such upon which history has been recorded. "I don't intend to roll back that far," writes our author, "just the period covering my life as a records management practitioner – which spans a shade under 50 years." In this article, he focuses attention on recordkeepers and their raison d'être.

By **Chris Simpson**

Let's look at the first record we influence after we emerge from our mother's womb – the birth record. While the recording of births has been going on for centuries, compulsory registration only commenced around the mid-19th century in the UK. Prior to that, churches created these records.

According to Wikipedia, *"Birth certificates for Roman citizens were introduced during the reign of Augustus (27 BC–14 AD). Until the time of Alexander Severus (222–235 AD), it was required that these documents be written in Latin ……."*[1] It is clear from the requirement to create the record in Latin that Data Entry Standards have been around a lot longer than you might have thought.

The record of our birth is only the start of the story. My early training in recordkeeping ingrained in me the *why* we keep records ie, for the following purposes:

- **Administrative.** Records have value in enabling effective decision making through learnings from the past ie, what has worked and what has not. Knowing how an organisation works facilitates constructive planning by knowing what responsibilities need to be fulfilled then incorporating the obligations in the planning process.
- **Financial.** How does an entity operate effectively if it does not know the comings and goings of its income and expenditure? Obligations around the creation and management of financial records are dictated in a variety of legislation.
- **Legal.** Litigation is a reality that all of us must be prepared for; while it simply makes good business sense to maintain and appropriately manage business records. Legislation also dictates that we must create and manage records of our business dealings.
- **Historical.** We have an obligation to future generations to leave readable footprints of how we functioned. Myriad genealogists would be lost without the written record.

## THE MANAGEMENT OF RECORDS

**How** we manage records is a reflection of the evolution of our profession. The how dictates the skills that we require through to the tools that we need. The key tool being the finding aid; there's not much point in stashing stuff away if you can't find it later. Although variations on this could reap rewards – as a young junior clerk in my first job I was amazed by *others* who

story snapshot

From the birth certificate to the grave, we cover 'how', 'when', 'where' and 'who' in the evolution of recordkeeping.

deliberately hid files out of order on shelves then miraculously produced them when rewards were offered to locate missing files urgently! The mystery location of files was lost when the miscreants moved on to other pastures taking that information with them.

Initially registers were the record. Births, deaths, marriages, land ownership, monies owed and paid were all recorded in lovely leather-bound volumes in copperplate handwriting, which was extremely difficult to read (check out *UK's National Archives site for useful clues on interpreting old handwriting* ).

We 'progressed' over the years and through the ingenuity of practitioners Kalamazoo loose leaf binders and ledgers were developed. The copperplate handwriting continued, though mistakes could now be made and pages replaced – did this affect the integrity of the record? Registers became the finding aid, recording essential metadata in the register made finding the record possible. The registers gave way to index cards; index card storage became an industry in itself.

## THE CREATION OF RECORDS

**When** records are created is often dictated by the 'why'. While financial records are mostly created at the time of the transaction, other records – usually some sort of document – are generally created as the document itself is. A single record can become part of a broader record when collated with other documents. For example, the creation of a case file for litigation may occur some time after individual documents are created.

Faxes caused a concern for a while: which was the original? The fax that was received or the 'original' document sent through the mail? To add to the problem, faxes printed on thermal paper were photocopied to preserve the image. There was also a period during the evolution of the typed record when inferior inks transferred mirror images of the record to the back of the adjoining page; and some inks simply 'fell off' the paper.

## THE STORAGE OF RECORDS

**Where** records were stored was dictated by the record's physical attributes. Box files allowed collation of like records and provided for quick and easy additions, although they were not very secure. Folders became the 'norm' and folder design and manufacture was a huge business. Simple 'brown backs' secured with a straight pin or one of many types of metal file fasteners evolved into sophisticated folders like T-Glide and tube clips. Folio numbering was the integrity system of choice – no, I'm not going there!

Altering the physical attributes of the record to reduce expensive storage space was a solution that gained a lot of favour and microfilm was seen as the saviour; it even became the subject of legislation that listed approved brands and models of machines. It was promoted as being machine independent with the simple magnifying glass being offered as a solution to reading the film if a machine wasn't available. Unfortunately this media also had problems with films that weren't stored in the correct environmental conditions going 'off'.

The tools and skills outlined so far moved aside for digital recordkeeping; or did they? There has been a common denominator throughout the evolution of record keeping and that is the recordkeeper.

## THE KEEPERS OF RECORDS

Recordkeepers are the '**Who**' and now we will focus on their reason for existence.

The sleeve bands and shades of the early registrars were cast off and fountain pens were replaced with the new ballpoint pens. Cardigans went when office environments improved, although the fashion for shorts with long socks and business shirts hung around a little longer.

What remained constant was the person: everyone was doing something about either creating or managing records, whether they knew it or not – though dedicated registrars and filing clerks were considered to be the only recordkeepers. We – the recordkeepers – were the finding aids used by a business' core function practitioners. We didn't create a lot of records; it was our job to lock the business' records away for the future and make sure that they could be found when they were wanted. As we gained maturity in enterprise hierarchy, we also started to feed the beast by providing reports and papers on our contributions to overall business strategies.

*They are those who have blazed trails for us to follow. They are those who have elevated our profession through prestigious honours. They are us.*

To find the records locked away on behalf of the organisation, recordkeepers used a variety of tools ranging from ladders, dust jackets, index cards, microfilm, correspondence registration, forms control, boxing, shelving, compactus, barcodes, colour coding and functional indexing. Then came CAR, mainframe computers, desktop computing, word processing, Y2K, RFID, WEB 2s & 3s, tablets, mobile and touch technologies – enablers and hinderers all. We met the challenges with assistance from education and training, conferences, professional development, RMAA/RIM Professionals Australasia, and networking. We made some errors and out of those errors we gained experience and knowledge.

What we did with that knowledge enabled us to evolve and keep up with the times. We became trendsetters, developing standards and driving innovation by partnering with some strange bedfellows along the way. Skills shared by like-minded professionals in IT and libraries enabled us to streamline our existing methods and develop better ones.

We became managers arguing cases and battling for resources in the board room. We had to understand the people element and the legislation (WHS, employment contracts, equal opportunity, discrimination, bullying), and step out of our comfort zones to become listeners, guides and mentors. We started thinking strategically about how we could add value to business objectives.

Fifty shades of opportunity were presented to us ensuring that we couldn't become stagnant. Record keeping for a time meant doing the best with what we have; this is what


Today's RIM professional can learn from the past and create their own fantastic future

recordkeepers have been doing for centuries. We have opportunities in front of us using digitisation as our tool; I wonder what will be here in 2016 as I complete my 50-year apprenticeship to attain journeyman status. None of us can become masters of this ever-changing craft, because the goalposts are being constantly moved.

## LEARNING FROM THE PAST

I recall reading a book many years ago, a fictional work on the construction of a dam, in which it was said that a dam builder has three to four dams in a career. I was developing an in-house records management system at the time, so this formed an analogy for me relating to the number of systems a records management professional could develop in a career. At the time a records manager often developed best practice systems to suit the organisation they worked for, later with the assistance of in-house computer programmers. Development of systems became less of a need as vendors worked with practitioners to develop off-the-shelf solutions then partnered with organisations to implement them.

Thanks to the efforts of those who have gone before us, today's records and information management professional can learn from the past and create their own fantastic future. As you journey through your life and career take time occasionally to reflect who the 'we' are that I've mentioned:

They are those who have blazed trails for us to follow.

They are those who have elevated our profession through prestigious honours.

They are us.

We are adding value; our role has changed as our colleagues take responsibility for not just creating the record but managing it. We are the auditors and the overseers of business record keeping. We provide seamless methodologies and solutions for those at the coalface to ensure that they fulfil their recordkeeping obligations as they do their 'real' jobs.

What of the future? We read a lot of the future in publications such as this one; I'm sure that it is a topic of choice as you network with colleagues. All I can add is to assure you that there will still be a need for the person in the digital world. Digitisation can't happen without digits.

### *Bibliography*

1 http://en.wikipedia.org/wiki/Birth_registration_in_Ancient_Rome
2 Patrick Lindsay, *Our Darkest Day*, Hardie Grant Books (Australia), 2011, p.166,

## LEST WE FORGET

In closing, I would like to head back almost 100 years to 19 July 1916 when Australia suffered its worst ever military defeat. It is hard for us to imagine the chaos and misery that was the frontline of the First World War. The angst of families not knowing the fate of their loved ones must have been unbearable. Many have worked over the years to fill these gaps in history. Lambis Englezos, a Greek-born Australian amateur historian, is one such person. His obsession led to the discovery of a mass grave containing 250 British and Australian soldiers who had been listed as missing from that battle. His story is told in a novel on the battle of Fromelles[2]. There have been many references to the quality of records of wars and conflicts and the recordkeepers who created them. Here is an extract from the novel, which encapsulates them:

*"Given the chaos, the death and destruction at the front and the limited means of communication of the day, it is understandable that the fate of so many individuals remains unknown. In fact, it is remarkable that out of that cauldron so many records have survived. It is a testament to the skill and the determination of the humble clerks and record-keepers who beavered away under constant stress that we have the material through which Lambis Englezos and his ilk can trawl to find clues that have opened up the quest for the missing so many years later."*

Lest we forget. ❖

### ABOUT THE AUTHOR

Chris Simpson is an active member of the RIM Professionals Australasia community, holding a number of positions on the Qld Branch Council since joining the Council in 1997. As a foundation member of the Qld Local Government & Corporations Chapter, he has advocated for the recognition of the unique needs of RIM professionals in regional areas in an effort to overcome the tyranny of distance. Chris recently 'retired' after nine years with Queensland's regional electricity distributor, Ergon Energy; he had previously spent around 30 years working in local government. Finding that he could not leave our industry cold turkey, he now works as an independent RIM contractor. The highlight of his professional career has been acknowledgment from his peers when awarded Life Membership of our Association in 2010.

# inForum 2014, Adelaide: 'What's Next?'

7-10 September 2014,
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**INFORUM 2014** themed 'What's Next?', will focus on the constantly evolving environment that the records and information management (RIM) industry is faced with and will attempt to provide answers to questions such as these:

- What challenges lay ahead for the industry and its practitioners?
- Do our foundation methodologies and practices remain solid and true or should they be reviewed and challenged in the face of the electronic era?
- Have past approaches to change management, gaining management buy-in and introducing or upgrading systems and technologies been successful?
- How can we learn from our successes and failures?
- What do practitioners need to do not only to keep up but to grow and flourish?

The multiple stream program offers a range of sessions and workshops

Sessions will include presentations, vendor sessions, workshops (including one on how to write a disposal program), a panel discussion on 'Why Standards are important' and a debate 'Will the paperless office *ever* happen?'.

Networking opportunities at social events complement the professional development program

## THE PROGRAM: WHAT'S NEXT?

The multiple stream program is complemented by extensive networking opportunities, optional workshops, some social events and a Trade Exhibition featuring leading industry providers of relevant software, products, storage, training, consultancy, preservation and recovery, safety equipment and legislative and advisory bodies.

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Clockwise from top: Adelaide is a food and wine lover's paradise; a historic buidling in scenic Port Adelaide; Adelaide's Central Markets; expanding industry contacts over coffee at inForum.

**Past delegates have reported that some of the immediate benefits of attending have included an increase in knowledge, productivity, problem solving and achieving buy-in, as well as expanding their industry contacts.**


## CONTACTS

- For more information on exhibition and sponsorship opportunities please contact Wendy Morris **wendy.morris@rimpa.com.au**
- Any other enquiries can be directed to Kristen Keley **kristen.keley@rimpa.com.au**
- For general information about Adelaide, the venue, the sessions or to register, visit the conference website: **www.inforum.net.au**

# RECORDS MANAGEMENT HERESY: WORSHIPPING AT THE ALTAR OF GETTING THINGS DONE

In this article, the author suggests an approach to building (or improving) a records management service by taking a business-focussed view of our discipline, and shares a few helpful tricks for dealing with certain ubiquitous RM problems.

By **Jonathan Fryer**

It's your first day at work as the shiny new records manager and your boss says to you: "You have next to no budget, you can't under any circumstance buy an EDRM system, you definitely can't have any more staff, don't disrupt any of the business teams 'cos they don't like it, there's a three year backlog of work piled up in the records centre… oh, and the legal team need a draft of a retention schedule for the entire organisation by next week. Any questions? No, good, off you go then."

In these troubled economic times it seems likely that that this is becoming the typical welcome for any new corporate records manager. And whether you are in the public sector or the private sector, the challenges are pretty much the same. Even if you have been in post for a year or three, the problems that haunt you are likely to be similar. So what can we do?

From personal experience I believe that we can actually achieve a lot with even the most basic of resources, as long as we are willing to sacrifice a few sacred RM cows along the way!

story snapshot

Always remember it's not about records management. It's about the business.

Focus on building credibility and capability.

Consider sacrificing some sacred RM cows on the altar of getting things done.

Records management should have the flexibility of an art.

## FIRST, ASK "WHY AM I HERE?"

The first thing to do when faced with the challenge to build (or improve on) an RM service or department is this: Stop. Don't dive straight in with all of those things they taught us on our degree courses like audits and retention scheduling. Instead, take a step back and ask the ever popular existential question "Why am I here?" Or, more specifically, "What is my purpose as a records manager within this organisation?" The obvious answer would be "to manage records", but this would be an error. Our purpose is *not* to create the world's most perfect record-keeping process. It is *not* to build elegantly defined classifications and thesauri and records series. Arguably it is not even to ensure that future historians can research the organisation – record keeping should never be an end in itself!

*Your first objective is to build credibility. You are smart and talented – that's a given, or else you would not be a records manager!*

No, as records managers our purpose is to support the business of our organisation, whether that business is selling insurance, treating patients, processing tax returns or manufacturing widgets. ISO15489 makes it very clear that the purpose of records management is to utilise information "in pursuance of legal obligations or in the transaction of business"[1]. The first half of that quote recognises the fact that we are sometimes forced to create records that serve no real purpose simply because the law says we have to, but that aside, the true purpose of records management is to support the transaction of business. So, recognising that fact, our next question should be "How can I best support the business of my organisation?"

Now the answer to that question will of course depend upon your specific context. Realising that not everything can be done at once, the first activities that you prioritise when you set out to (re)develop a records management service should be aimed at meeting two main objectives.

## BUILD CREDIBILITY

Your first objective is to build *credibility*. You are smart and talented – that's a given, or else you would not be a records manager! But you need to let your stakeholders, your senior management, your internal customers know that you are not only smart and talented, but that your service offers real advantages to them personally. As such, the first activities you focus on should not necessarily be the traditional activities of the RM department, which are often invisible and slow to offer a return on the investment of time, effort and cash. Instead, find out what problems are bothering your key stakeholders and look for ways in which you can volunteer a solution.

As a records manager you probably have a wealth of transferable skills – most of us have a good working knowledge of IT, information law, process design, information security and dozens of other areas that overlap with our core domain. Go slightly beyond your normal remit and use these skills to add value to a high profile project or to solve a nagging problem. Whatever your chosen target is, whether tightening up the workflow dealing with customer enquiries, carrying out those vital but dull IT risk assessments that no one else wanted to do, or assisting a project manager deal with all of the paper discovered by a major office move, innocently position your assistance as simply "This is simply the kind of thing that the records management service assists with – its about records after all!".

If you have chosen the right targets (and of course your help is actually of value!) then you only have to do this a couple of times before it rapidly buys you a licence to operate within your organisation. Project managers owe you favours. Senior stakeholders see your service as value adding rather than a cost sink. And suddenly permission to carry out more traditional records management work becomes easier to obtain. Scheduling time with key staff to carry out that information audit becomes that much easier. You get the picture. You have bought credibility for both yourself and your service. And if you position things properly with your stakeholders, the remit of your records management service grows far beyond just the records centre to become whatever you want it to be – almost every business project is 'actually about records management' if you want it to be!

## BUILD CAPABILITY

Your other primary objective is to build (or enhance) *capability*. Think about the kind of services that you want to offer to your business – do you have the skills within your team to support that? The equipment? The processes? When you are not being a superstar assisting the business, it is worth spending some significant time on developing these things to the point where they work like clockwork and deliver on time, every time. In particular, there are a couple of things that are fundamental.

Firstly, you and your team need to have the right skills to do the job. And I'm not talking about core records-management skills – those are just the price of entry. I'm talking about customer service skills, business analysis skills, IT skills. The wider the skills-base of your team, the more they understand the work of your organisation, then the more you will have to offer to the business. Consider spending this years training budget on some non-core skills that can be used to enhance your RM offering. This might be training to develop your knowledge of the core business of the organisation – for example, any records manager in an insurance firm should understand at least the basics of the insurance market. Or it may be training to develop some wider practical skills – for example, being able to use MS Visio is effectively an essential when it comes to process mapping, which is itself a core skill for information audit work.

⇒

Secondly, your core RM activities need to be up to scratch. Your records centre, your catalogue or database, these things are the underpinning of your most basic services. So rethink them from the position of your internal customers. Does your records centre process make it as easy as possible for your customers? Is each step for their benefit, or for yours? What can you change to speed things up or minimise the amount of work they have to do? As a rule your customers shouldn't be spending time working on steps that are not immediately and directly for their own benefit. And does your database make records easy to find and retrieve? Is it as easy for your customers to use as searching on Google and shopping on Amazon? If not, what can be done to make it that simple, that seamless? A poor underlying process or system can undermine your good work to build credibility – who will trust you to tweak the information flow of their team if the process that you manage yourself is sub par? You absolutely have to get these things right… but not to the point where you lose your focus on delivering visible results to your business.

## REMEMBER IT'S ABOUT THE BUSINESS

So that's the first step, your first 100 days on the job. What's next? It's more of the same – credibility and capability.

The real trick is to always remember that it's not about records management. It's about the business. Make sure that everything your service does is focussed first and foremost on the business. Work that your team undertakes should never be in the service of some kind of RM nirvana that generates no visible or measurable benefit to your business. Whatever the issue, always look for pragmatic solutions that deliver instantly visible results for your internal customers – theoretical RM best practice may often need to be sacrificed for a 'good enough' solution that truly adds value to a core business process. But as long as you keep delivering for the business then you maintain your credibility, and therefore your ability to keep getting things done.

*Make sure that everything your service does is focussed first and foremost on the business*

Focussing on customer / business needs has another advantage – it leads us away from those dangerously attractive 'big' RM projects. An organisation-wide information audit or a mandatory naming convention is almost never a good idea if your organisation has more than a few dozen employees. Why? Because these projects have a tendency to never end. By the time you have completed the work with one business unit or department another has been restructured and you need to start again. By the time you have enforced compliance in one team, the rest of the business has moved on without your new standard. A project that never ends is a project that fails to deliver what it promised. And a failure to deliver on promises undermines your credibility. Sometimes a large project is unavoidable – your board of directors or permanent secretary has demanded it – but wherever possible try to work on small projects that deliver incremental improvements to one or more business processes, and that deliver targeted solutions with minimal disruption to the business. If you are trying to make small incremental improvements then there is a good chance that you are actually focussing on a business problem, will be able to deliver value, and that value will be visible to the customer you are working with. And if the rest of the business has moved on, it won't matter to your small, self contained project – you have still delivered exactly what you said you would to the people who will immediately benefit from it. Visible improvements, particularly in core business areas, are far more valuable to both the organisation and your credibility than a failed 'big bang' project that probably didn't offer much to the front-line business in the first place. Small is beautiful!

## MARKET YOUR HELP – CREATE 'PRODUCTS'

So how do we get involved with these small business focussed projects? Be proactive. Don't sit and wait for customers to wander into your records centre by accident! Instead, look for problems which you know your team can solve, and volunteer their assistance. Market the different types of help you can provide. One useful thing you can do is to bundle up your core skills into 'products' that you can 'sell' internally on a kind of consultancy basis. "Setting up a SharePoint site? – we can help with that! Is your team wasting too much time dealing with junk mail? – we can spend some time with you to set up automated rules!" – you get the idea. Creating 'products' like this (with their own ready made checklists and pre-defined processes etc) will enable you to rapidly and efficiently replicate 'ideas that work' on a mini-project basis, and each and every time a business unit has a similar problem you can move quickly and efficiently into action with a solution that is already tested and simply needs tweaking to fix the context. Push these products out to the attention of line managers in the business by any means you can – intranet, staff newspapers, whatever is appropriate for your organisation – it pays to advertise what you can do!

'Selling' your service in this way has another benefit – it means that the internal customers that you are working with actually want your input – they are asking you for help! Suddenly in their eyes this is not just another compliance mandate from high, this is a collaboration to actually achieve something useful. And as you work with your customers you can use their budget to meet your own agenda too – "Of course we can help you structure that scanning process… and while we are here, have you considered building in retention periods for the scanned documents so that we comply with the DPA?"

There is a danger that this approach may generate more interest and work then you can handle. That's fine – don't be afraid to prioritise or ask people to 'wait in the queue'. As a rule of thumb, prioritise projects that deliver rapid results with minimal disruption to the business. Rapid successes will continue to buy you brownie points, and customers waiting for your assistance will be able see how useful your help will be once their turn comes around! Another part of effective workload management is knowing when to stop.

## CURB YOUR PERFECTIONISM

As a broad generalisation the RM profession tends to attract a lot of perfectionists – we are all interested in precision and classification and detail! Unfortunately this sometimes leads us to carry on working on something in order to get it 'just right' when, in reality, it would have been perfectly fine to close off that task three weeks ago! We really need to keep this tendency under control – to most people involved in front line

business a solution that meets 80% of their needs now is better than a 100% solution delivered in six months time, and unless you work in pharmaceuticals or another field where 100% accuracy is essential, that is a perfectly acceptable result.

For example, a retention schedule that is 'not quite finished' might still allow the business to free up tens of thousands of pounds of outsourced storage space, money which will be wasted if you don't deliver the schedule until next year when you have finally tracked down the last few esoteric documents! A ruthless approach to accepting minor imperfections in your work is key to keeping your workload down. The Pareto Principle applies here – if 20% of the time you would prefer to spend on a task will get you 80% of the desired result, and that 80% is an acceptable solution to the customer, then the logical thing to do is to simply stop, deliver that solution as is, and use the remaining 80% of the time that has suddenly become free to do something else – you will accomplish five times as much in the same period!

## GETTING THINGS DONE

And this is where we may need to consider sacrificing some sacred RM cows on the altar of getting things done. Some of these suggestions may be records management heresy of the first order, but consider the following.

### *Focus on the process*

A traditional high-level information audit tends to examine information use within an organisation (or organisational unit) by diligently recording the records that are found to exist and by verifying the accuracy of that audit via conversation with the owners of those records. This is time consuming and much of this time is wasted examining a large volume of trivial documents – obsolete records, one-off letters, and old sets of conference papers and the like, most of which are 'clutter' of little or no value.

More modern information audit methodologies (eg, Buchanan and Gibb, 2007[2]) tend to include a wider look at useful things like information flow, but they also often set out to do more peripheral things as well such as measure alignment with compliance and to assess cost/benefits – they attempt to turn the process into a proper financial audit. This can be enlightening, but it is often of no immediate use to your internal customer, and so again is 'wasted' work.

Instead we are most likely wanting to carry out an info audit simply to develop a classification scheme or a retention schedule so as to enable some practical RM work, such as to structure some electronic folders or dispose of some old records. In this case, why not forget the mass of records that have accumulated over the years and instead focus on the inputs and outputs to the business process itself, as described and documented by the process owner(s)? This will tell you very quickly about the key records that are actually used or created by a given department without having to search through them all, and without picking up any of the extraneous material caught by a traditional audit.

This is obviously most effective in a process-driven environment, but with a little thought can be applied to business units with a less defined workflow, because everyone has core tasks they perform over and over –

for example, a personal assistant may create a set of minutes every week and this is a process with inputs and outputs. This focus on process enables the development of an accurate classification scheme or retention schedule very quickly – the 80/20 rule at work.

It also has the advantage of keeping the focus on the business itself rather than on esoteric RM considerations, and this may be of more significant benefit then the saving in time and effort. Firstly, the internal customer is comforted to realise that you are indeed focussing on their requirements and not your own agenda, because you are focussing on *their* work. More importantly, examining their own processes in this way may illumine areas where the process itself can be improved – for example, to eliminate double keying or duplication of records, and these improvements can eliminate the causes of some RM problems rather than merely managing their symptoms. This is very similar to the Kaizen / Lean Flow approach to business improvement, and this school of thought has much of use to offer to us as RM practitioners[3].

***Take a 'big bucket' approach to retention schedules***

A traditional retention schedule is usually drawn up on a series basis. Each and every specific set of records is recorded, and a retention period is assigned to it. The primary reason for this is that it supports the transfer of these records into an archive at the end of their working life as the original arrangement of the records has already been described in detail, and/or enables the keeping of detailed records of anything that has been legitimately destroyed at the end of its life. As with the traditional information audit, this process starts out by looking at which records already exist. However, this traditional approach has two main problems.

Firstly, it tends to generate a retention schedule that is difficult to apply – I once saw a retention schedule generated on this basis that ran to several hundred pages of A4 when printed out in an 8pt font. No one in your organisation will ever bother to wade through a document of that size to work out what they are supposed to do! Instead, they will simply create their own solution and all of the work that went into the creation of the schedule is wasted.

And that's the second problem. If 80% of your records are not going to be retained for archival purposes and are simply going to be shredded then auditing them and recording them to an archival-standard level of detail solely to assign them a retention period is simply wasteful.

A more efficient use of resources is a retention schedule based on a 'big bucket' approach[4]. A big bucket retention schedule starts with classes of documents instead of series, and thereby recognises two things. Firstly, it recognises that most of your records are, in reality, pretty similar – minutes from your executive team meetings are likely to be pretty much identical in form and structure to minutes from the meetings of your non-executive

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board. Secondly it recognises that there are probably no more than a dozen different retention periods that apply to your organisation – if your regulator says that all meeting minutes need to be kept for ten years, for example, then it doesn't matter which panel or department those minutes came from. For the purpose of a retention exercise, distinguishing between the various sets of minutes is pointless if they are going to be retained for the same period.

The 'big bucket' approach therefore simply aggregates all of those similar series into a class simply called 'minutes'. This results in a retention schedule that contains only a dozen or so categories and which will rarely be longer than a single page of A4 for a given business unit (with the exception of HR and Health & Safety who for legal reasons often need to be more specific about how long they keep certain documents).

A dramatically shorter schedule is more easily applied to records by both members of staff and IT systems alike, and is therefore *much more likely to be used*. The trick is to stop trying to do two things at once – a retention schedule should be just that – a menu of retention periods to apply to different categories of record. It doesn't need to be (and therefore shouldn't try to be) a detailed, archival-quality catalogue of every single document or records series held by your organisation.

*A dramatically shorter schedule is more easily applied to records by both members of staff and IT systems alike, and is therefore much more likely to be used*

***Indexing: don't fill in all the fields!***

Every corporate records centre that I have ever come across has had a backlog of records awaiting classification and indexing. Sometimes this is simply due to the reactive nature of a records centre's work, but in most cases this has been due to a fundamental flaw in the indexing process. And the flaw is this – the records manager has assumed that every entry in their database or catalogue has to be complete, and that the indexing process has to be completely consistent. Let me explain why this is a flaw.

Your records centre database probably has multiple fields for the entry of metadata for each record, and in most simple databases the same set of fields will be applied across the board to each record type/class. Here's the first trick – *you don't have to fill them all in*! Some records may indeed need 10 different fields of information in order to uniquely identify them, but others will need only three, so for those, fill in the three necessary fields and only the three necessary fields! I can't tell you the number of times I've seen a records manager filling in unnecessary data fields simply for the sake of an artificial consistency across the dataset. It's pointless – a good database can handle null fields.

The basic purpose of your records centre database is to allow you to identify a specific record and to retrieve it – therefore pretty much any work, any data entry, any addition of context that is not necessary for that purpose is a waste of time (and possibly also of hard cash if you pay an outsource company to index your files for you on a 'per field' basis).

Now I can hear my archival colleagues howling in outrage at the loss of all of that lovely context so here's the second trick – you don't need to be consistent. You don't need to index every record to the same standard or level of detail. You probably already have a good idea which records will need to be passed to archive at the end of their retention, and it probably works out at about only 20% of your records at most. When a set of records that fall into that 20% arrive in your records centre for indexing and storage, index each and every individual file to within an inch of its life – fill in every field, record its provenance and series and context and anything else you can think of. You don't need that data to run the records centre, but your archivist will love you. But when last year's telephone bills turn up for storage solely for compliance purposes, dump them in a box, record the box as 'Phone Bills 2010' or whatever, and have done with it – they will be identifiable and retrievable, and no one will care. And as this latter approach will cover 80% of your records, suddenly your backlog will shrink dramatically.

## THE FINAL TRICK...

I'm sure there are many other areas of theory and practice where a pragmatic and context-specific rethink might solve many of our organisation's RM woes. None of this is rocket science… and maybe that's the problem. We want it to be. We campaign hard for our field to be recognised as a science, but perhaps we are actually trying too hard to standardise and codify when RM should have the flexibility of an art. We make things over-complicated when really we should be trying to make things simple for our customers. We try to teach our customers theory when we should be trying to astound them capability. Our value to our organisation doesn't come from what we know how to do, it comes from what we actually manage to do. And that's my final trick – when we make things simple for our service users, our customers, our colleagues, then our RM services don't look like a science and that's okay… because instead they look like magic. ❖

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## RULE 5 CREATE A FAVORABLE SOCIAL CLIMATE

As noted in the introduction for Rule #1, you seek to change the "want to" for all individuals in the recipient society. Creating a favorable social climate is a big part of how that is done. The new patterns must become desirable and the old patterns undesirable, perhaps even unthinkable – definitely something no one would willingly want to do. There are many ways to accomplish this; here are a few to consider as well as others you can develop for your specific program:

- Have the president or CEO personally provide a message identifying the value of the change to the company, giving their personal endorsement for the changes, and thanking everyone in advance for their support and cooperation.
- Have local leadership also send supportive communications and visibly participate in reviewing and monitoring the progress of the implementation.
- Establish a compliance certification process for individuals and/or departments. This provides a challenge to work toward (which is a motivation for many) that provides for certainty of compliance and then recognition of compliance with the opportunity for departments and individuals to showcase their accomplishment.
- Establish a challenge or contest for individuals and/or departments to achieve specific compliances.
- Associate your change activity with other popular social movements like 'Going Green'.

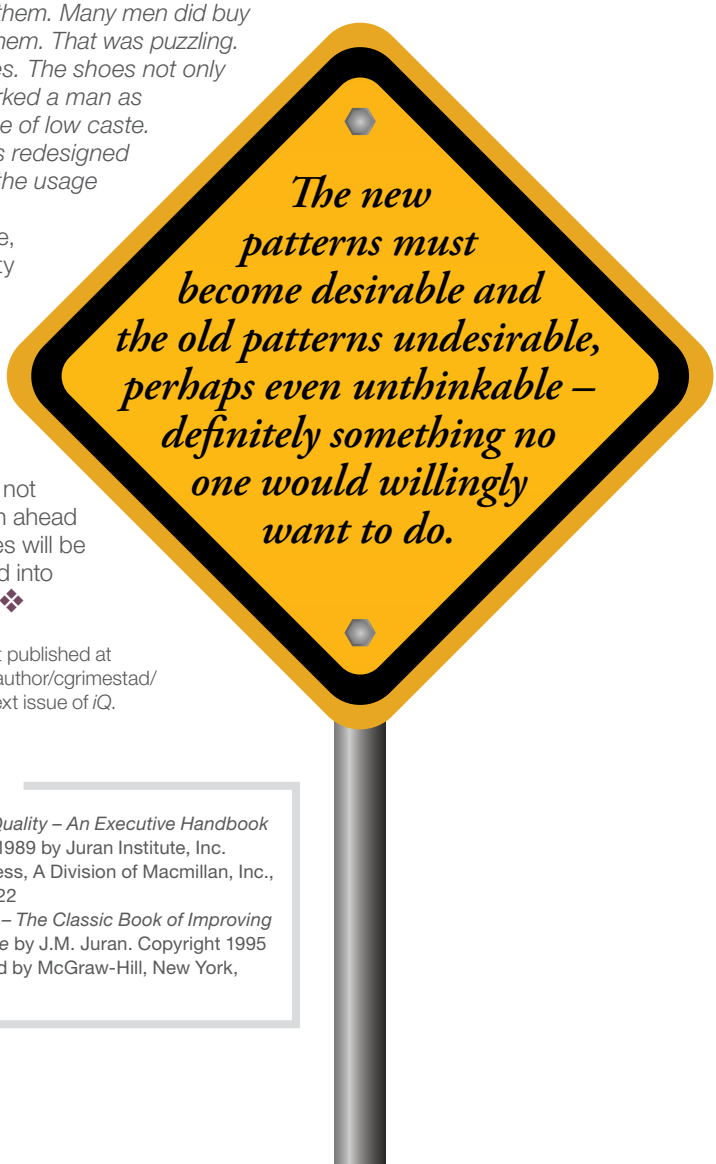
In his book *Managerial Breakthrough*, Juran tells the following illustrative story:

*"In the early factory days of few machines, materials handling was done by human laborers. The most important single operation was picking things up and putting them down. Periodically, things were dropped, feet were injured, toes were smashed.*

*"Then someone invented the safety shoe which provided a 'hard hat' for toes. Industrial companies propagandized these shoes and subsidized the price to make it easy for the men to buy them. Many men did buy them, but few men wore them. That was puzzling.*

*"The trail led to the wives. The shoes not only looked unwieldy; they marked a man as a factory laborer – a badge of low caste. When the safety shoe was redesigned to look like a dress shoe, the usage rate rose sharply."*

Note the clear, agreeable, and certain benefit of safety shoes wasn't enough. It wasn't until the safety shoes were favorable socially that they were acceptable, and the change went forward. I love it when we can learn from others' mistakes and not make them ourselves. Plan ahead to assure that your changes will be launched and implemented into a favorable social climate. ❖




The Rules of the Road were first published at http://blogs.ironmountain.com/author/cgrimestad/
The Rules will continue in the next issue of *iQ*.

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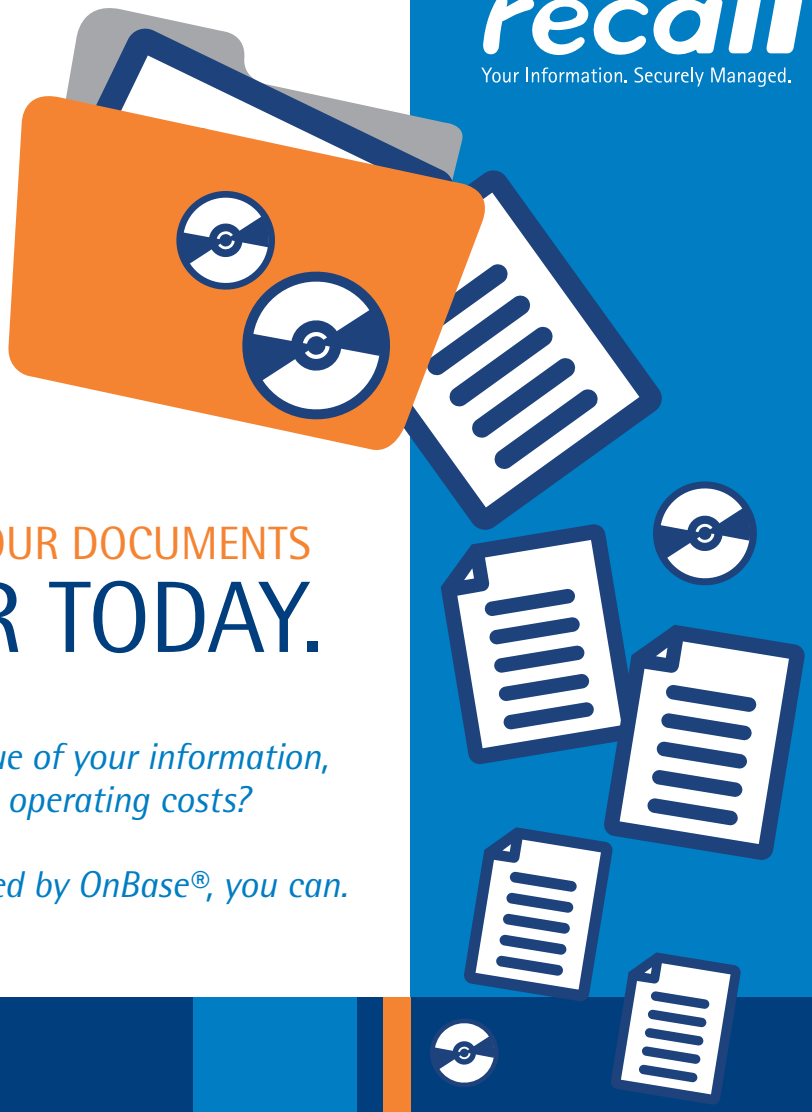

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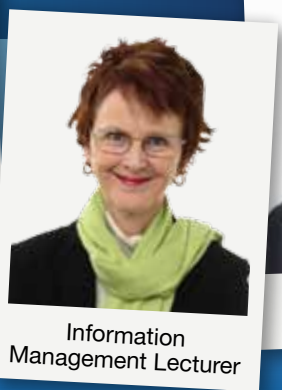
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