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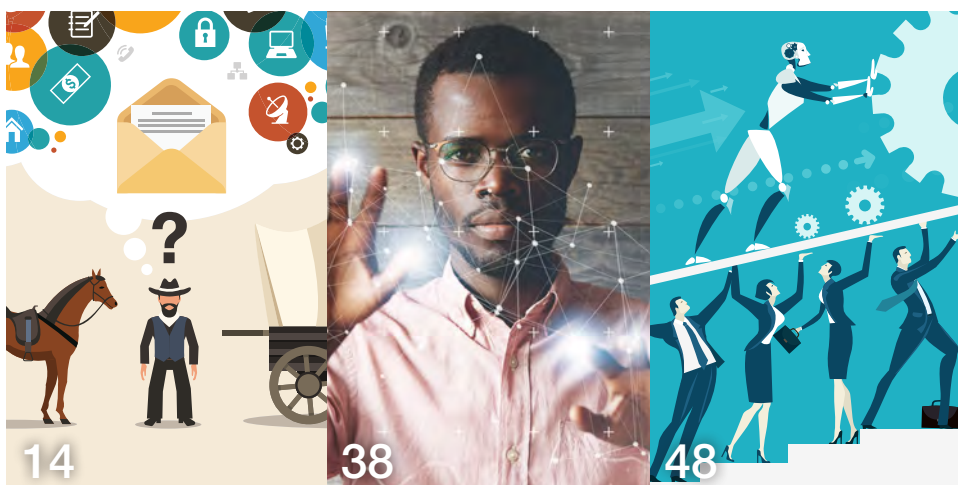
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Thomas Kaufhold, Chair of the Board, RIMPA

RIMPA governance and moving forward



Since September last year, the Board has been very active in undertaking reviews of just about all of the Company's key components – resourcing and staffing, the Constitution, CPD program, financial governance, and most importantly interactions between the Board, Branches and members.

RIMPA, previously named RMAA, will be celebrating its 50th birthday in 2019, and as it is with most organisations that have been around for a long time, RIMPA has experienced highs and lows. What has worked well in the past does not necessarily mean ongoing success into the future. We all know there have been massive and disruptive changes in the world of records and information management over the last decade or more. In this ever-changing environment, RIMPA is obligated to represent its members in a meaningful and effective way, and is working on becoming more agile, responsive and able to provide a suitable platform for debate where industry, academia, professional members and other interested individuals can participate and contribute to the future of RIMPA.

The Board, over the last six months, has set an ambitious agenda, with the first part of the agenda being largely achieved. This consisted of stabilising finances and accounting practices to ensure the ongoing financial viability of the organisation, setting up new administrative arrangements, training new staff and upgrading software. To ensure that the Board continues to meet corporate governance responsibilities, the newly engaged accounting firm can provide advice on governance, including human resourcing and employment conditions.

The second part of the agenda is to set up conditions where the future direction of RIMPA can be planned. This is where the newly established GABA (Governance) Branch will be the main driver, and work has already begun on reviewing the Continuing Professional Development (CPD) scheme. A survey on the scheme has been completed, the results are being reviewed, and a report will be considered by the Board at its next meeting in June. The Constitution has been thoroughly examined, as it became apparent that there are a number of errors in section numbering and grammar which have been corrected. It is planned for a draft of the corrected constitution to be presented to the professional membership for consideration at the next AGM in September.

The Board and staff have been busy in developing the program for RIMPA's showcase event inForum to be held in September 2018 in Hobart. The program should be in your hands as you read this *iQ* and includes presentations that are both current and trendsetting. I encourage you all to view the program and attend our vibrant convention.

Finally a reminder to professional members that you're CPD needs to be updated by 30 May 2018 and can be accessed on the RIMPA website (Members Only).

Thomas Kaufhold
RIMPA Chair of the Board

WORLDWIDE NEWS

National Archives of
Australia Director-
General, David Fricker



NAA Chief slams Federal Budget job losses

National Archives of Australia Director-General, David Fricker, has hit back at federal government demands for cost savings requiring 40 staff cuts by 2019-2020.

In a strong commentary to the capital territory's daily newspaper, *The Canberra Times*, the Director-General said the NAA was facing budget cuts through a series of national government efficiency dividends and savings measures.

He protested: "I want to strongly emphasise that this downsizing is not due to any view that the Archives is under performing. Indeed, the feedback I continue to receive from government and public stakeholders is that we provide an excellent service and have a high level of professionalism."

He confirmed that the institution that describes itself as "Australia's memory" could meet its goal to reduce its staff numbers to 320 by 2019-2020 through natural attrition but it could turn to voluntary redundancies to reach the target.

The National Archives had kept staff informed of budget concerns and had supported some with re-deployment and training to move into new roles, Mr Fricker said. In the *Times* interview he spoke directly to anxious staff, insisting:

"LESS WITH LESS"

"As I have often said, it is only because our budget is being reduced that we must look constantly across the services we provide and ask how we can do 'less with less'.

"And as we shed some functions, we must re-commit ourselves to ensuring that the services that we do continue to deliver are performed in line with budget constraints while maintaining the high standards of professionalism and creativity that Australians expect from their National Archives."

The move to find cuts to its average staffing level coincided with the need to create new roles within the organisation

to develop its digital capabilities, Mr Fricker said, adding: "Priority is being given to reassigning existing ongoing staff when internal vacancies arise."

The Archives' cuts will come as other public service records management units face similar redundancies. The Australian Bureau of Statistics will axe 100 more jobs, 50 of them in the national capital, in the latest round of job cuts. The Australian Broadcasting Corporation is dismantling its historic sound and reference libraries across the country and making 10 specialist librarians redundant to "improve budget" (see story on page 7).

JOB CUTS

Archives NZ again berates Kiwi public service recordkeeping

Archives New Zealand, the Kiwi public record office, has once again heavily criticised the country's public service for recordkeeping failings. It goes further, challenging government ministers, chief executives and others with key roles in the government information system to understand "effective information management".

It also acknowledges its own part in the deficiencies: "Archives New Zealand has responsibility for supporting, monitoring and directing the sector to facilitate compliance with information management requirements. We regulate around 3,000 public offices and local authorities including approximately 2,500 school boards of trustees."

The 3,000 entities include some 200 Central Government agencies, enterprises and departments and 300 local councils.

The declarations come in an Archives NZ report, entitled *Managing public sector information and data and why it matters*, the latest in the annual series demanded by NZ governments since enactment of the *Public Records Act 2005*.

More than a decade after the Act, the report insists "Public sector organisations need to actively manage the information they hold". It goes on to identify areas with "room for improvement", many revealed by the institution's on-going public sector surveys:

- ◆ "31% of respondents were not able to provide us with an estimate of the quantity of digital information held."
- ◆ "40% (of respondents) could not provide a full picture of which systems their digital information were (sic) held in."
- ◆ "70% of respondents still hold information on shared drives ... a concern."
- ◆ "Only 18% of respondents used information asset registers, though 20% were developing one, which is a positive."
- ◆ "Only around 56% of public offices have a (Archives NZ) disposal authority for all the records they create."

The report revealed that Archives NZ has been seeking help with tests for digital transfers of records but "fewer organisations than expected have been in touch". Only six public offices "have digital information they plan to transfer in the next two years", the report said.

A new requirement of the institution's Information and Records Management Standard is the appointment of a senior leadership team "Executive Sponsor" for information management. The Archives reported: "The Chief Archivist and senior managers met with 48 executive sponsors ... from the core public service, district health



boards, tertiary education providers and local authorities."

It went on: "These meetings were productive and the executive sponsors, on the whole, were engaged and responsive."

Reactions to the archives report from within the RIM community has been widely varied. One commentator told iQ: "Overall I thought it was lacking a strong sense of direction. Nothing to keep errant CEOs awake at night."

On the other hand, a listserv posting praised it as: "Fabulous. Rarely do we see a report that is so informative and educational."

The Archives report deals with some matters unconnected with public service recordkeeping. Another observer praised the report's chapter on artificial intelligence algorithms and data ethics, posting: "I'm pretty stoked to see a heading like 'Ensuring the accountability of government when key decisions are made by machines' in this report!"

A pdf version of the Archives NZ report, *Managing public sector information and data and why it matters*, can be found at http://archives.govt.nz/sites/default/files/report_-_state_of_government_recordkeeping_2016-17.pdf

ISO Records Systems adopted by China as national standards



The two leading products in the International Standards Organisation family of blueprints, Management Systems for Records ISO 30300, have been adopted by Beijing's official Chinese Standardization Administration (SAC).

The standards, published by ISO in 2011, describe terms, objectives and requirements of management systems for records to help an organisation achieve its goals. They have been established

worldwide, including Australia and New Zealand.

The process of applying the two norms to China's business environment began in 2012 within a group chaired by Beijing's Renmin University School of Information Resources Management, Professor An Xiaomi, the ISO project leader for the first 30300 guide. Professor An has been a member of ISO's records management authoring sub-committee, ISO/TC46/SC11 since 2005.

Chinese National Standards are designated GB/T34110-2017/ISO30300:2011 and GB/T34112-2017/ISO30301:2011 and were implemented from 1 November 2017.

One in four UK workers have maliciously leaked business data

Egress Software Technologies, a data privacy and risk management company, has released research to understand how work e-mail is frequently misused by UK employees.

The research revealed that a significant number of workers have purposefully shared confidential business information outside their organisation (24%), typically to competitors, or new and previous employers. In addition, half of all respondents said they either had or would delete e-mails from their sent folder if they had sent information somewhere they shouldn't.

Almost half (46%) of respondents also said they had received a panicked e-mail recall request, which is not surprising given more than a third (37%) said they don't always check e-mails before sending them. The biggest human factor in sending e-mails in error is listed as 'rushing' (68%); however alcohol also played a part in 8% of all wrongly sent e-mails. Autofill technology, meanwhile, caused almost half (42%) to select the wrong recipient in the list.

Of those who had accidentally sent an e-mail to the wrong person, 40% accidentally insulted the recipient or included rude jokes, swear words and even risqué messages. Critically, almost one in ten (9%) accidentally leaked sensitive attachments, such as bank details or customer information, putting customers and their own organisations at risk.

ABC plan to shut down sound libraries and axe staff draws fire

The ABC is dismantling its historic sound and reference libraries across the country and making 10 specialist librarians redundant to free up floor space and save on wages.

Radio National, Classic FM, JJJ and all the other ABC programs rely on the Sydney, Adelaide, Melbourne, Perth and Hobart libraries, which are packed full of CDs and vinyl as well as books and journals after 85 years of collecting.

The librarians know the collection intimately and suggest music for documentaries and other programs.

The libraries will be "culled and packed" to reduce duplication and to "align with production requirements", according to the staff announcement.

A single "consolidated" library will survive in Melbourne with a skeleton staff who will digitise a fraction of the collection. A small classical music collection will remain in Sydney for Classic FM.

The host of current affairs show PM, Linda Mottram, described the proposal as "ripping the heart out" on Twitter, following reports of the move in *The Guardian*.

"This is yet another 'death by a thousand cuts' inflicted on all music resources in the ABC," said a former ABC librarian.

Source: *The Guardian*



The survey of 2,000 UK workers who regularly use e-mail as part of their jobs was conducted by OnePoll on behalf of Egress to explore how common e-mail misuse is within Britain's organisations.

E-mail is frequently misused by the UK workforce," said Tony Pepper, CEO and co-founder, Egress.

"While offending an accidental recipient may cause red faces, leaking confidential information can amount to a data breach. As we move towards the EU General Data Protection Regulation, it has never been more important to get a grip on any possible risk points within the organisation and, as this research shows, e-mail needs serious attention."

Vale Ray Holswich, a generous man in life, friends and passion for the profession



"If I were to describe Ray in one word it would be 'generous' – in all aspects of his life: personal life, his friends, his work team, his professional life and certainly with his passion for RMAA/RIMPA."

So says current RIMPA Board Chair, Thomas Kaufhold, remembering his friend for 35 years, former RMAA federal president, Ray Holswich, who died on 13 March after a long illness. Ray was two

months short of his 75th birthday. He had diabetes and had suffered a history of heart trouble.

Ray came to the fore in the RMAA's formative years. He was records manager at Darwin's Northern Territory University, now the Charles Darwin University. He was one of the driving forces in founding the NT Branch of the RMAA and was its first president.

Even in those early years, he showed his passion for information management culture. An earlier RMAA federal president, Peter Smith remembers: "Ray was interested in kindred associations and learned that the president of the Australian Library and Information Association, Jenny Cram, was visiting during the National Conference there."

Peter says: "To my knowledge no such meeting had ever taken place before. It was a very relaxed breakfast with nothing specific discussed other than a commitment to continue to have further talks on things of mutual interest – a first for our association."

FOR BETTERMENT OF PROFESSIONALS

Ray's federal president predecessor, Denis Comber, remembers: "Ray was an effective networker who recognised the invaluable support of industry representatives who were vital to the success of the RMAA. He was also active in ensuring that the Association was represented at various forums which were responsible for developing education and information management strategies for the betterment of information professionals."

Ray's generosity was one of the strengths that got him elected NT director, federal vice president and, in 1991, federal president. For example, a then 19-year-old records management newbie in Victoria, Anne Cornish, now Queensland RIMPA director, had the temerity to question the federal president at a branch meeting. She remembers:

"I stood up and asked why a corporate member could not vote at meetings. Ray was very patient and calming in his response and made me feel like I was heard. He took me aside after the meeting and suggested that I should consider nominating for the Federal Board in Victoria in the coming year. I took this advice and have never looked back."

"He gave me confidence to realise that all opinions need to be heard even though he had years of experience on me. I've spent many a meeting with Ray either agreeing or disagreeing but we always parted friends. This was a man that

I always looked up to."

Uniquely, Ray was elected to serve two terms as federal president, the first as NT director, then from 1996 to 1999, as an ACT Branch nomination. His immediate successor as president, then Cook County record manager and NSW Branch director, Chris Fripp, remembers the constitutional hassle that caused.

FEDERAL PRESIDENT TWICE

"It was during a board meeting when he advised us that he was moving from Northern Territory to ACT. The issue was that you could not serve as president and board member representing NT if you lived in Canberra. After lots of discussions it was resolved and he stayed on."

The Board did not want to lose Ray as leader just then, because he had landed a good job in the capital. Chris Fripp recalls: "He was the only person to serve in the role of national president in two different states for a total of six years."

Thomas Kaufhold and Ray were 'lock step' friends after they first met in Alice Springs at the RMAA's second national convention. Thomas gave Ray the 'generous' title, recalling: "He could be trusted and gathered good people around him who were glad of his company. But let not his generosity fool you. Ray was capable of seeing through the murky waters and calling it for what it was."

His tribute to the man is uncompromising. "Ray's contribution to the RMAA and the profession was enormous during the 1980s and 90s. He was there through the building phase of the RMAA. It can be attributed to his leadership."

NAUGHTY AT TIMES

"He was a confident presenter, showed authority and never raised his voice. Socially, Ray was a delight with wit and a dry sense of humour – a little naughty at times."

He enjoys remembering an executive meeting chaired by Ray. They had met in a serviced apartment that the board members were sharing to save money. Some time after the meeting started one of the directors excused himself briefly. Thomas remembers:

"All of a sudden a sharp explosion came from the bathroom. Quite a shock! There was no doubt it was the throne sitter. Not a word was said at the table and the silence continued when the director rejoined us ... continued, that is, until Ray looked the perpetrator straight in the eye and asked if he was all right."

"Of course I am alright," came the indignant reply.

"Ray responded straight-faced in dry tone: 'I thought you might want to see a doctor to get stiches or something.' End of decorum ... briefly."

GENEROSITY THROUGHOUT

Ray's generous spirit survived all through his RMAA/RIMPA career. Some years later, by then a venerated elder statesman, he met NZ Branch's first national president, the newly-elected David Pryde, soon after his appointment. David recalls:

"I was like a possum in the headlights over the new responsibility. I knew Ray by reputation but hadn't spoken more than a few words to him."

"He told me to just be myself, always base decisions on what would be good for the branch, the association and the members. And have fun, he advised. My trepidation disappeared, we had a night cap and were good friends after that: a dynamic man, supportive and nurturing, holding great respect, what New Zealanders call 'mana'."

Search for historian to complete David Colquhoun's unfinished stories



New Zealand archivist, librarian, writer, curator and researcher David Colquhoun could not finish his latest book and blog page before he died in mid-March aged only 66. Colleagues and friends hope a leading historian can be found to complete the works.

The book, some text from which is on the author's website, <http://davcolq.co.nz/>, reveals

the sporting career of George W Smith, an astonishing early 20th-century NZ jockey, All Black and rugby league professional, sprinter and hurdler. The blog feature follows the 1920 NZ tour of the Prince of Wales, later King Edward VIII, a wildly successful royal visit that, the study reveals, the prince did not enjoy.

David Colquhoun retired four years ago from his "dream job" as curator of manuscripts for the Wellington's prestigious Alexander Turnbull Library, part of the National Library of New Zealand. He had acquired a number of important collections for the library and promoted wide use of its huge holdings. After 25 years helping historians, researchers, archivists and authors with their researches, he wanted to join them.

JACK LOVELOCK BIOG

An enthusiastic athlete, his enjoyment from distance running gave him the subject for his first book, *As If Running on Air*, the definitive biography from the journals of Kiwi Olympian Jack Lovelock, 1933 world record holder over a mile who took the 1,500-metres gold medal at the 1936 Berlin Olympics in world-record time. Then came a collection of his circa 2010 biography columns from the Wellingtonian community newspaper.

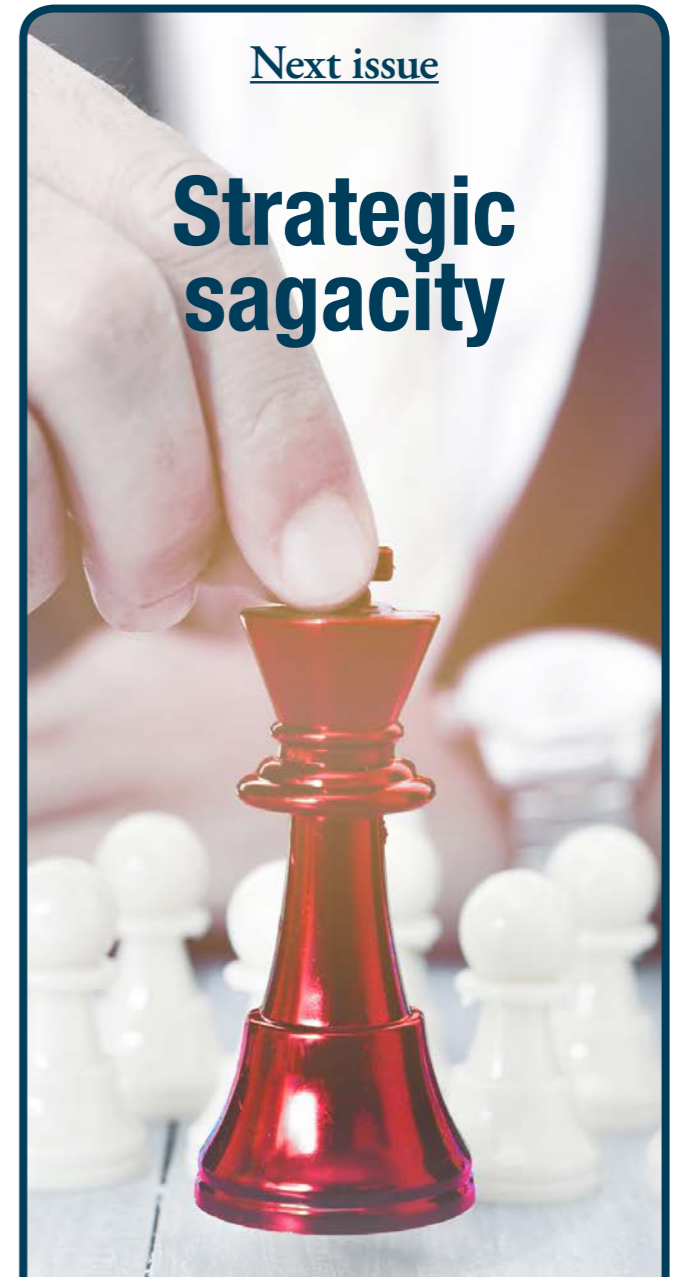
In 2015 David Colquhoun curated a Wellington Portrait Gallery exhibition of 150 years of what Wellington's daily newspaper, *The Dominion Post*, described as "prostitutes, politicians, nuns and nobodies" and told some of their stories in the exhibition pamphlet. Tragically, by then, he had begun to feel the disabling effects of a rare degenerative disease that caused his death.

The Colquhoun website carries his detailed researches on many New Zealand entities, local legends and personalities, and RSS tags ranging from Kiwi pioneer motorist Agnes Bennett to World War I.

Late last year, he added a warning to one or two web pages: "Due to ill health I am no longer available for archives work (of the kind set out below)." The website will remain on-line until its Internet license expires when it is expected to be archived by the National Library of NZ.

Next issue

Strategic sagacity



The August 2018 issue of iQ will feature a section on 'Strategic sagacity' – covering strategic and operational planning, information governance, compliance, managing risk, meeting critical business needs, writing policies and procedures, disaster planning and more – plus general features. If you have an article on any RIM-related topic, we would love to hear from you.

Copy due:
Friday 29 June.

Seven deadly sins of strategy

Strategy is often confused with tactics and is often poorly crafted because one or more of the seven sins of strategy have been committed.

By Kevin Dwyer



1 DELUSION

Leaders, potentially in search of notoriety or 'fame', overreach in determining the strategic goal. They lose sight of the realities of the market they operate in and their organisation's capability and capacity, setting their organisation up for failure.

2 MYOPIA

Leaders remain blissfully unaware of the competitive advantage of their organisation in the eyes of the consumers of their services and are too timid in their approach to strategic goal setting. Or they remain blissfully unaware of the limitations in their organisation which must be resolved if the organisation is to reach its strategic goal.

3 CONFORMANCE

Leaders mirror what they hear and see in the media and decide to follow popularised 'industry practice' in developing and articulating their strategy. They follow a fad without fully understanding its meaning and the capability and capacity required to deliver the strategy.

This has lately been seen with far too many organisations claiming to follow a strategic intent of 'disrupting' their industry. In the past, we have had management by objectives, 'lean' service delivery, total quality management and business process re-engineering to name a few.

They all have similar attributes in that they are simple, promissory, easy to cut and paste and legitimised by a guru or one organisation doing it well. They all die out to be replaced by a new fad with a few practitioners in specific industries with specific applications making them continue to work for them.

4 INHIBITION

Leaders fail to communicate the strategy clearly enough to their shareholders and or employees. Buy-in does not eventuate and the strategy never gets off the ground.

Leaders must harness effective communication techniques using powerful symbols, emotion and facts to get their message across. They must pay respect to the different communication preferences of their audiences and take responsibility for the effectiveness of the communication. They must measure to see whether they succeeded or failed and adjust as necessary.

5 IMPROVISATION

Strategy is implemented without a plan that considers the capability and capacity of the entire organisation. It is not good enough to develop a 'customer first' strategy without considering what is needed in the supply chain to deliver upon the marketing promises.

Implementation of the strategy is done in a reactive fashion playing out as a set of disassociated operation [plans of different departments].

6 DISORDER

The strategy is not aligned to a vision and the purpose of people in their roles is not aligned to the strategy. People are therefore neither able to visualise what the strategy will deliver for customers, employees, regulators or the public nor how they can contribute to the outcomes by effectively executing their role. Loss of morale usually follows.

7 HUBRIS

Leaders ignore information provided to them about risks and issues the strategy may hold for the organisation and continue to do so as the strategy is executed. They take opinions over facts and mistake belief for analysis.

ABOUT THE AUTHOR

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Blockchain technology and its promise

Blockchain provides an elegant framework for creating and managing distributed digital ledgers. It shows tremendous promise for addressing transparency and data security/privacy challenges that we face today, but shouldn't be considered a panacea.

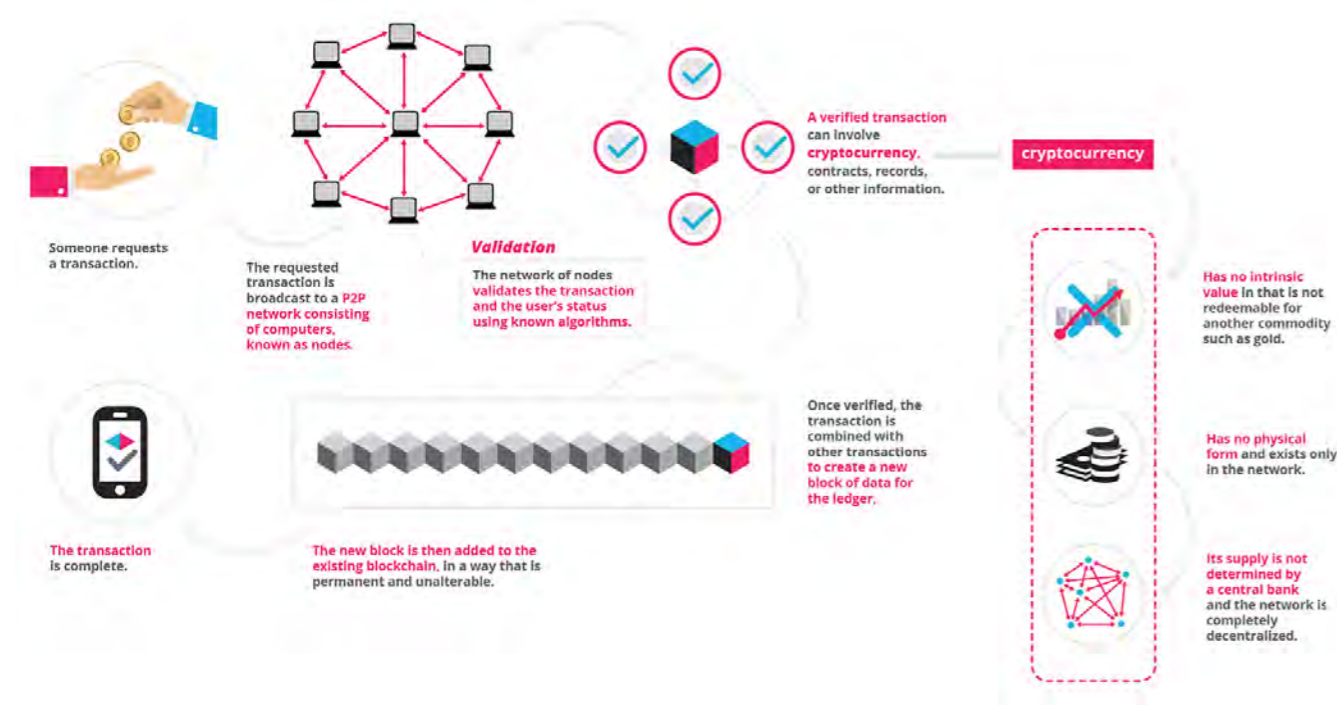
By Jay Zaidi

In the new sharing economy, consumers and organisations transact directly with product and service providers – cutting out the inefficiencies and costs incurred via third parties. The power of secure, transparent and frictionless transactions in a trusted ecosystem has given rise to an interest in the blockchain. Data security is certainly top of mind for many firms, given the recent security breach of personally identifiable data of 145 million Americans at Equifax.

WHAT IS A BLOCKCHAIN?

The blockchain was designed to support Bitcoin (a cryptocurrency) based transactions in a secure manner, using a decentralised ledger and cryptographic mechanism. Even though it was originally designed to support Bitcoins, the underlying framework and cryptographic mechanism are suitable for numerous other applications.

The infographic below (source: BlockGeeks) depicts the sequence of events in a typical blockchain transaction – from requesting a transaction (top left) – to validating the transaction, applying smart contracts and cryptocurrencies to it, followed by creating a new block to the existing blockchain.



WHERE ARE WE IN THE BLOCKCHAIN HYPE CYCLE?

Blockchain has gained tremendous popularity within the user community and various companies – although most industry analysts indicate that it is in the early stages of maturity. In early 2017, the *Harvard Business Review* suggested that blockchain is a foundational technology and thus “has the potential to create new foundations for our economic and social systems”. In Gartner’s 2016 Hype Cycle for Emerging Technologies, blockchain was listed in the ‘peak of inflated expectations’ phase. The hype cycle indicated that it will be another five to 10 years before blockchain reaches mainstream adoption. According to Accenture, an application of the diffusion of innovations theory, suggests that in 2016 blockchains attained a 13.5% adoption rate within financial services, therefore reaching the early adopters’ phase.

WHAT ARE ORGANISATIONS CURRENTLY DOING?

Many companies are exploring blockchains potential by piloting it and developing prototypes or proof of concept applications, while a small minority (mainly in the financial services domain) have deployed it in production. The US Government has indicated its support for blockchain and is encouraging federal agencies to use it.

In August 2017, the US Department of Homeland Security, Science and Technology Directorate, unveiled a list of 13 small businesses working towards “the development of new cybersecurity technology”. The companies are part of the 2016 Small Business Innovation Research program.

Each was awarded approximately \$100,000 in funding, for a total of \$1.3 million, and four are using blockchains in their product.



Blockchain has gained tremendous popularity ... although most industry analysts indicate that it is in the early stages of maturity.

◆ Governance – Since blockchain operations are typically consensus-based, one way to address it is to implement a strong governance model across the network participants. Governance rules such as who can get on the blockchain, what they can do, how do they communicate, who can see what, and how smart contracts are validated can be programmed into smart contracts.

◆ Digital ecosystem – Blockchains only work with digital records. Therefore, organisations that wish to use it will have to digitise paper documents first.

◆ Primitive data architecture – Blockchains offer a very primitive data architecture, especially compared with mature database systems that offer a sophisticated set of features for accessing, manipulating, and analysing data that have been refined over many years of development.

CONCLUSION

Many companies are exploring blockchain technology for specific applications or building blockchain-based solutions. The financial services industry was a natural fit, given blockchain’s initial focus on cryptocurrency transactions. Other verticals such as insurance, healthcare, public sector, media, telecommunications, travel and hospitality and energy will see emerging use cases and solutions implemented using blockchain technology. There are over 70 types of blockchains in the market today, and these blockchains will have to be integrated with each other to operate seamlessly.

Companies that wish to pursue it must understand that the technology is maturing and there are some critical operational challenges to overcome. Developing a narrowly scoped proof-of-concept (POC) implementation is recommended as a first step, followed by an in-depth review of the tactical and strategic business needs. A more robust production implementation should consider the lessons learned from the POC, industry best practices, the current state of the blockchain ecosystem and emerging trends, as well as an appreciation of the fact that one may have to transition to a different ecosystem in the future (which will have a cost and resource implication). ◆

SOME BLOCKCHAIN IMPLEMENTATION CONSIDERATIONS

Blockchain introduced some major paradigm shifts – crypto-economics, cryptocurrency, independent transaction validation, and a decentralised ledger with no central authority. While this technology shows tremendous promise, the blockchain ecosystem is still maturing. Here are some implementation considerations:

◆ Throughput – Extreme levels of scalability and elasticity will be key in coping with unforeseen transactions peaks, as well as the computationally heavy hashing and cryptography algorithms essential to any blockchain implementation. The heavy hashing and cryptographic algorithms that are inherent to blockchain design introduce significant processing and transaction overhead and pose challenges with respect to scalability and transaction throughput. For example, Ethereum which is a popular blockchain fabric provides a throughput of 15 to 25 transactions per second, which is inadequate for most business applications. Several vendors such as Chromaway (Postchain) and Microsoft (Coco Framework) are addressing these challenges. Chromaway (an AlyData partner) has developed Postchain which represents a new concept, the consortium database, which combines the power and flexibility of mature database systems with the secure collaboration and disruptive potential of blockchain. It represents the convergent future of enterprise blockchain and database technology.

◆ Vendor lock-in – Another major issue is that companies could be locked-in to their blockchain vendor. The cost of transferring blockchain-based records to another organisation would be exceptionally high, so a business could find themselves trapped with a vendor.

◆ Interoperability – With production deployments on the horizon, operational considerations will take centre stage – particularly the interoperability of emerging blockchain implementations with existing core systems. In addition, the compatibility between multiple versions of a distributed ledger will become crucial.

ABOUT THE AUTHOR



As the founder and managing partner of AlyData, Jay Zaidi and his firm help leaders derive tangible business value from their data and information assets – to power sales, marketing, innovation, product development and risk management. Clients include financial services, healthcare, biotech firms and federal agencies. Jay has led strategic data and analytics engagements at Fannie Mae, Citibank, Hilton Hotels, the DOW Chemical Company, Ohio Edison, Illinois Health and Science, IBA Molecular, and the Consumer Finance Protection Bureau.

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The psychology of records management: carts and horses

For any change activity, there is a natural order of events, actions and activities that must be identified and followed for best results.

By Craig Grimestad

There is an old saying – ‘Don’t put the cart before the horse’. We all understand that, but have you ever stopped to think why not? I took some time recently to think about this, and the mental picture was highly amusing – if not hilarious. The goal, of course, is to travel in a straight line.

Too often companies, in their efforts to establish or improve their records and information management (RIM) or information governance (IG) program, in effect are putting the cart before the horse. There is a natural order of activities that will produce the desired result, just like having the cart follow the horse. There is an unnatural order of activities that will not produce the desired result, including resistance from a workforce which understands and respects the natural order. Let’s take email as an example. Companies may decide to install discipline in the usage of email – a goal that is well understood and agreeable to all. However, there are numerous steps, some time-consuming, to accomplishing this. Companies may choose to do one or more of the following: discontinue use of .pst files, establish a maximum account size, establish a maximum age of email retention, or install or upgrade an enterprise content management (ECM) system. Each of these actions represent improvements in RIM/IG and can be implemented agreeably with the workforce when the appropriate activities to accomplish this are identified and enacted in their natural order (allowing sufficient time for the activity to be completed).

Most individuals in the workforce understand that ‘resistance is futile’ (to quote an often-used phrase from a science-fiction TV series) to the changes the company is making. Therefore, all the workforce needs is a reasonable plan for the change and appropriate time to accomplish the change for a smooth transition. Let’s look at the major parts of the project to instill discipline in usage of email:

- ◆ **Communication:** Provides an overall view of the plan to install discipline in the usage of email, as well as what is expected of each individual in the workforce, along with the specific steps along the way and the time of their implementation.

- ◆ **Destination:** Identification or establishment of repositories and applications for allowed or required retention of emails.

- ◆ **Segregation instructions [Usually provided by policy or procedure(s)]:** Criteria for determining which emails need to be retained, which may be retained, and which must be disposed of.

- ◆ **Retention requirements [usually provided by a Records Retention Schedule (RRS)]:** Clear instructions, based on date or event, for which of emails must be disposed of immediately, which may be kept, and which must be retained, and for how long.

- ◆ **Transfer instructions:** A path or transfer process for the removal of emails from their present location to disposal, or to their new home.

- ◆ **Timetable:** The time allowed for individuals to comply with each step of the plan.

There is a natural order of activities that will produce the desired result, just like having the cart follow the horse.

The natural order of the implementation steps might differ slightly from one company to another due to special circumstances, but generally they will be the same. The destination(s), segregation instructions and transfer instructions must all be available prior to requiring individuals to begin to dispose of or transfer emails from their account.

Otherwise, individuals will be forced to take action, blindly resulting in any number of unintended results including: wrong emails retained, wrong emails deleted, wrong disposals and/or wrong destination(s). All of this creates resistance from the workforce that knew what needed to be done and what the natural order was. If the missteps can be corrected, it will require additional time-consuming rework.

Whether its email, shared drives or implementing new or upgraded applications, there is a natural order of events, actions, and activities that need to take place, with appropriate time, for the ‘straight line’ desired result. Thankfully the natural order is obvious to most. Companies would do well to ensure they are following the natural order in the implementation of their change, including ensuring prerequisite steps are sufficiently complete before requiring the next step. ❖

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.

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THE AUDIT MONSTER

– let's make it serve our needs

Take the time to educate staff on the benefits of running a RIM audit program, and you may find attitudes changing towards the 'dreaded' process.

By Beatrice Siu

AUDIT – SUCH A DREADED WORD.

Understandably, it isn't a fun job to do, it can feel tedious, and it is hard to get staff to fit this work in amongst their other tasks and professional obligations. When I approached the matter with wanting to start a proper records and information management (RIM) audit program, my team weren't interested in doing this work at all.

It can be baffling, hearing the million and one reasons why staff don't want to run an audit. Some staff blame the database and software being the problem because there are always limitations to what a software can do. Some simply don't feel there is any incentive to improve the process at all because they see no real benefits. Others simply just complain about the amount of work and time it would take to bring their physical files as well as their databases up to scratch, so again, why bother?

Here lies the real problem. Cultivating the right attitude and mindset to staff that audits are good. How does one even tackle this? Let's begin with drafting some questions:

- ◆ Why are people nerve-wracked by this? Do they find it overwhelming?
- ◆ What does the importance of audits mean to them (perhaps apportioning blame or correcting mistakes)? It sure does make people defensive.
- ◆ Why the avoidance?

This set of questions got me thinking about how audits are perceived and the steps involved in devising materials to assure staff that audits aren't something to fear or avoid. Here's what I came up with.

UNDERSTANDING WHAT AUDITS ARE FOR

Audits are not about a witch hunt. The audit process isn't about identifying staff members' mistakes. It is meant to be a tool used to improve business processes and practices. In a routine audit record program, the general purpose is about recommending improvements to records practices, standards and compliance.

Depending on what the business could be lacking, a record audit program can include the following:

- ◆ Identify gaps in the process where information is lacking or untrustworthy.
- ◆ Make processes more efficient so we can get our work done in a timely manner.
- ◆ Assess policy or compliance standards on how organisations manage their records.
- ◆ Correct poor business behaviours and practices.
- ◆ Make the records management process visible again. This means helping others outside the business understand the nature of records work and why there is value to records management.
- ◆ Help bring more funding or resources.

The aims are to coach staff on seeing how an audit serves as a tool for business needs. The more an individual perceives audits to be less about 'their' work and instead more about the system and procedures itself, we can face less deterred responses about running a RIM audit program.

After convincing a team of the value of a RIM audit program, next comes another challenge. Training them to know what a well-run audit program consists of – these are the sets of guidelines I began teaching my team:

- ◆ A well-run audit is objective, well-communicated and presents us with room for improvements.
- ◆ Goals and objectives need to be defined.
- ◆ Goals and objectives should be realistic and achievable.
- ◆ Scope the size of the job. This includes deciding on how much work there is to do, how long it will take (create a checklist).



- ◆ Set up some defined measurements, i.e. how many files are created or are requested in a given month? What is the error rate found in a group of files?
- ◆ A plan is broken down into clear phases and this is communicated openly across other businesses that are frequent customers and rely on your business services.
- ◆ Clear milestones throughout different phases of an audit are there for us to break a mammoth job down into workable chunks.

Slowly but surely, as I take my team through the RIM audit process I've laid out, along with continual coaching, they're starting to see an audit isn't actually as bad as they had made it out to be. As they understand the purpose and value of the work, they felt less daunted by the nature of the work itself.

I believe if we take time to educate staff on the benefits of running a RIM audit program, while providing strong, clear guidelines, we can begin viewing audits as a tool to serve our needs. My experience with getting staff to change their attitudes towards RIM audits certainly hasn't been easy or smooth – but there is progress!

Driving for improvements is key and normalising the process itself can bring even more value to our records. Have you come across similar or different lessons and obstacles with staff when it comes to RIM audits? What creative solutions have you found that helps de-mystify and eases staff with their audit experiences and/or perceptions? ❖

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THE CIA OF SECURITY AND ACCESS

The CIA of Security is a triad model – with CIA standing for ‘confidentiality, integrity and availability’ – designed to provide guidance for enterprises in developing policies for information security.

By Linda Shave

The philosopher Plato (423BC-348BC) said, “Good people do not need laws to tell them to act responsibly, while bad people will find a way around the laws.” How apt is Plato’s quote?

Hackers and villains will continue to experiment with new tools and techniques to find a way to attack the internet of everything (IoE), network systems, personal devices, smart grids, cyber physical systems, sensors and objects. Hackers live for the thrill and bragging rights and villains for the rewards their thefts bring. One might argue that the more complicated the puzzle – or the more challenging the target – the greater the reward.

Often hackers and villains see breaching security as a game and an opportunity to showcase their achievements. Bragging rights as well as rewards come to those hackers and villains who find ways around laws, technology and systems to execute the ultimate cyberattack. Simply breaching security is often the hacker’s intrinsic reward so each security breach is a victory. The villain’s motivation is usually tied to some form of fiscal reward.

WHAT IS THE CIA OF SECURITY?

We should not confuse the CIA of Security with the American Central Intelligence Agency, which is a civilian foreign intelligence service of the US Federal Government. That CIA is tasked with gathering, processing and analysing national security information for the US Federal Government.

The CIA we refer to in ‘CIA of Security’ stands for ‘confidentiality, integrity and availability’, and is a triad model designed to provide guidance for enterprises in developing policies for information security. The CIA of Security is sometimes referred to as the ‘availability, integrity and confidentiality (AIC) triad model’ to avoid confusion with the Central Intelligence Agency. The fundamental security principles represented by the CIA triad model are to ensure that both the data and the information systems that process the data are protected. The CIA triad model takes into account different controls, physical security, technical security and human activities. Table 1 provides a high-level description of the three points of the information security triangle which are Confidentiality, Integrity and Availability.

CIA triad security model terms	Brief description
Confidentiality	Confidentiality is a set of rules that restricts access to data. Confidentiality is also closely linked with privacy.
Integrity	Integrity refers to the certainty that the data is not tampered with during or after submission. Integrity also involves maintaining the consistency, accuracy, and trustworthiness of data over its entire life cycle.
Availability	Availability denotes that data is available when it is needed. Availability is also a guarantee of reliable access to the data by authorised people and/or groups. Availability also requires protection of data and technology against obsolescence.

Table 1 – CIA triad model terms and brief description

CIA OF SECURITY AND PRIVACY

Confidentiality as outlined in the CIA triad model is not only a set of rules that restricts access to information, as described in Table 1, it is also closely linked with privacy. Therefore, it is important to understand the difference between security and privacy as they are two separate concepts. See Table 2.

Terminology	Brief description
Security	Security is about protecting such data from loss, or unintended or unauthorised access, use or sharing.
Privacy	Privacy is about the appropriate collection, use and sharing of personal data.

Table 2 – Difference between the meaning of security and privacy

To complicate matters, ‘privacy’ may have different meanings due to factors such as context, prevailing social standards, and geographic locations. There is no agreed definition of privacy, which can make it challenging to debate. However, the predominant concept persists that ‘privacy’ is the appropriate collection, use and sharing of personal data to accomplish business tasks.

Although security and privacy are two separate concepts, the importance of these two ideas intersects for the customer if their personal data is not safeguarded. Risk management for data security and privacy of that data (including personal data, see Table 3) should be safeguarded against external malicious breaches, inadvertent internal breaches and third-party partner breaches.

WHAT IS PERSONAL DATA?

Personal data stem from three data types: self-reported, digital exhaust and profiling data (see Table 3).

Type	Description
Self-reported data	Information people volunteer about themselves, such as their email address, work, education, age and gender.
Digital exhaust data	For example: location data, browsing history which is created when using mobile devices, web services or other connected technologies.
Profiling data	Personal profiles used to make predictions about individuals’ interests and behaviours which are derived by combining self-reported, digital exhaust and other data.

Table 3 – Personal data types

Personal data is described in privacy and information security circles, as data (information) that can be used on its own or with other data to identify, contact or locate a single person or to identify an individual in context. With the advent of rich geo-location data and associative analysis such as facial recognition the magnitude of personal data collected is greatly expanded, so are the challenges for security in protecting such data from loss, or unintended or unauthorised access, use or sharing. Coupled with this, a further privacy challenge

is the need to comply with a range of conflicting regulations on privacy, especially as privacy regulations can vary by region, state and country.

THE CHANGING LANDSCAPE OF SECURITY

The Internet of Things (IoT)

The concept of the Internet-of-Things (IoT) was introduced in 1999 and evolved from the machine-to-machine (M2M) technology that originated in the 1980s, in which computer processors communicated with each other over networks. The major difference today is that modern technology devices cannot be considered processors. They are sensors and relays that simply facilitate the aggregation of data. As the IoT continues to advance the interconnectivity between information sources and individuals, and technology continues to drive connectivity, cloud, data analytics and mobility, privacy and security concerns will continue to grow. Therefore, we must look at new models to deal effectively with security and privacy.

Big data and dark data

Government and the enterprise continue to collect, process and store massive amounts of structured and unstructured data as an outcome of business activities. This data is referred to as 'big data'. Big data poses extra challenges to the CIA paradigm because of the sheer volume of data that needs to be safe guarded, the multiplicity of sources it comes from and the variety of formats in which it exists.

Further challenges for big data is that as time passes the data (information) can become disjointed, the meaning for which it was collected is lost, records are forgotten, and files are lost within the organisation's digital repositories. This significant group of uncontrolled information is escalating and is referred to as 'dark data'.

Dark data is data (information) assets that are normally created and used once, such as log archives, zip files, project folders, duplication and even active data which becomes inactive and over time is forgotten. The enormous volume of data being created, captured and stored is ever-increasing and consequently dark data is growing. Dark data can include confidential, personal or sensitive information and presents a challenge for security, privacy and compliance.

Application programming interfaces (API)

We hear about API's but what exactly is an API? In brief, an API stands for 'application programming interface'. An API describes how to connect a dataset or business process with some sort of consumer application or another business process.

API's also allow for multiple consumer applications to be connected and are normally based on a contract between different applications and their partners. API's are the connectors that are doing the heavy work of moving data and performing specialised tasks behind the scenes.

The contract between the different applications and partners includes the administration, how the data will be structured and controls the rules about how they exchange data. If the partners agree on a set of rules, information can run freely between their applications.

These API interfaces exchange data in the background and expose data to third-party applications. This data is also decoupled from how they are used and presented. This means that an API only has to exist once, but the data can be accessed and used in different ways. Therefore, there is a potentially unlimited amount of completely different

applications that can access the same API and use this data in entirely new situations. API's have to date been mainly used in retail/marketing.

For example, Expedia – which compares some 200 booking sites to find the ideal hotel, flights, cars and holiday packages at the best price. In this example Expedia is using a number of API's. These API's are interrogating and searching across a number of different sites that have a hotel API, pricing API, flight API, car hire API and holiday package API to provide the consumer (customer) with a single holistic view. These API's are only using real-time data that is not normally highly secured, because as open access data it has little or no potential risk to the consumer or the supplier.

Blockchain

The digital transformation of business presents enormous growth potential for blockchain technologies. In brief, blockchain is a growing list of records, called blocks which are linked and secured using cryptography.

In our digital world of gargantuan amounts of digital data (ones and zeros) are being captured, processed and analysed. Any piece of data, document or asset can be expressed in code and referenced by a ledger entry, meaning that blockchain technology has great potential for the future. It is therefore worthwhile to understand how the progress in cryptography distributed ledger architecture and cryptography techniques such as blockchain might be applied. This might help business in securing information, smart grids, smart cities, smart industries and smart government now and into the future.

THE CHALLENGES FOR SECURITY

Application programming interfaces (API)

I would like to point out that the use of API brokers is not new. There are many record management vendor products such as Objective, TechnologyOne, HPE Records Manager and others that utilise API's. These have traditionally taken the form of embedded records management solutions or API's between their proprietary software and other core business systems such as human resources (HR), payroll and financials.

What we are now seeing is a trend towards business pioneering the use of API's as shared REST (RESTful) Microservices. REST stands for Representational State Transfer – actually a 'web service API'. REST API's are based on URLs (uniform resource identifiers) and the HTTP protocol. REST API's use a single uniform interface. This can simplify how applications interact with the API by requiring they all interface in the same way, through the same portal. They can be simple to build and scale, however they can also be massive and complicated to maintain. Reasons for building an API to be RESTful might include resource limitations, fewer security requirements, browser client compatibility, discoverability, data quality, and scalability of the web services.

As previously outlined, API interfaces have to date been mainly used in retail/marketing and we used Expedia as an example. We also touched on the fact that API interfaces exchange data in the background and expose data to third-party applications. The use of API's as shared REST (RESTful) Microservices as highlighted in the Expedia example are in essence using REST API's, URLs and HTTP web protocols. These API's are interrogating and searching across a number of different sites which have a hotel API, pricing API, flight API, car hire API and holiday package API to provide the consumer (customer) with a single holistic view.



The use of API's as shared REST (RESTful) Microservices for records management as a service takes on a whole new perspective. By default, information and records management has a focus on collecting, managing, securing, protecting, accessing and using records in a controlled environment. These API's are using real-time data that is not normally highly secured because it is open access data and has little or no potential risk to the consumer or the supplier.

Microservices for records management using data extracted, moved and used from one or more business systems across agencies or companies provides a new challenge for security, privacy and access. For example, API's and the use of data for entirely new situations may have privacy implications. In this instance the extraction of data taken from a different system or to create a new application may be in breach of the purpose for which the 'information' was originally collected. The data or the use of the data in a new application may now be out of context of its original collection, purpose and use. Further, through data normalisation this data could be pieced together to expose the identity of a person or details that may in fact amount to a data breach.

One must not forget that if the API is accessing sensitive, classified or protected data that it is also likely that the API interface is exchanging data in the background and exposing data to third-party applications. We will need to take steps to protect the data being exchanged as the API protocols and credentials can be visible to intermediaries. Moreover, anyone can snatch your API consumer's keys to access your data.

Further, if we are using 'partner' API's then they need to be designed with the same level of security. As technology, products and services continue to evolve; data and user

interaction must be managed across the entire supply chain. One must also consider the possibility of HTTP and URL redundancies, the different partner API's becoming obsolete and the data collected becoming contributors to 'dark data'. Therefore, API's can become a security and privacy risk if data is intercepted, dark data is not managed and/or the Partner API's are not kept up to date.

Blockchain

Blockchain as previously indicated is a growing list of records, called blocks which are linked and secured using cryptography. In Table 4 we look at two types of cryptography.

Type	Description
Symmetric cryptography	It is symmetric because the same encryption key is required on both sides. This adds to the possibility of interception of the data (information) when it is passed from one side to the other.
Asymmetric cryptography	Asymmetric cryptography (also known as public-key cryptography). It is asymmetric because there is a different key used on each side to decrypt and encrypt. The key used for decryption is never transmitted so there is potentially no risk of interception.

Table 4 – Two types of cryptography

Key protection and key governance in blockchain is essential as the use of private keys are directly tokenised to assets such as contracts, smart grids, cars and energy. Tokenising assets is the process of digitising an asset by appending a digital representation to an unchallengeable ledger. In this case a blockchain digital distributed transaction ledger. Securing the 'keys' is also crucial because once the keys are lost or stolen, so are the assets themselves.

Another consideration is scalability. Blockchain networks contain huge amounts of keys on the backend when using multisignature (also known as multisig) security architecture. Existing hardware security modules (HSMs) typically store no more than 10Ks of keys. This poses a question – how can this be scaled to cater for millions of transactions and potentially billions?

IS IT POSSIBLE FOR CRYPTOGRAPHY CODES TO BE BROKEN?

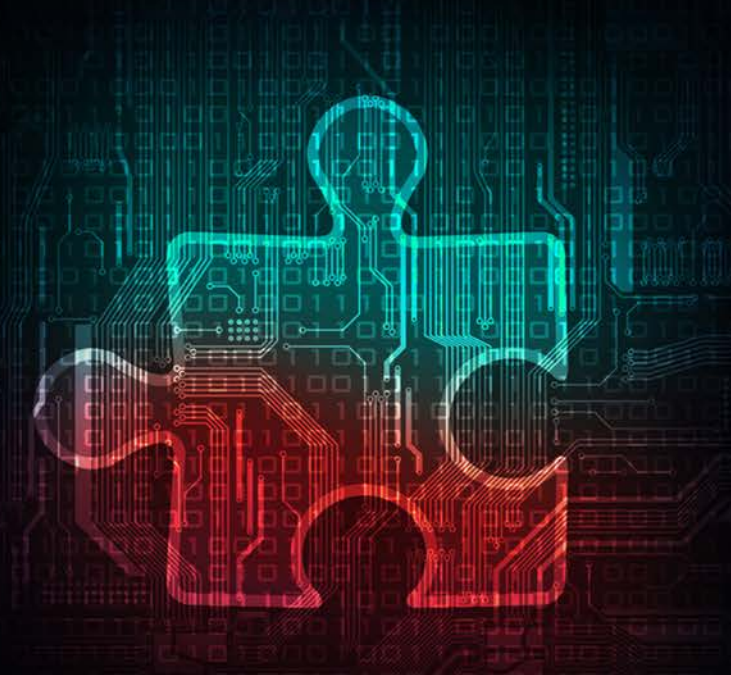
Before we go forward to discuss if security codes can be broken, we will need to better understand the five areas of cryptography and relevant jargon. See Table 5.

Type	Description
Cryptograms	A cryptogram is a type of puzzle that consists of a short piece of encrypted text. Cryptograms also looks at the study of codes and symbols as well as creating them and solving them.
Cryptology	Cryptology is the mathematics and application of formulas and algorithms that underpin cryptography and cryptanalysis.
Cryptography	Cryptography is an essential tool for protecting information in systems. There are two main cryptography areas – these are symmetric cryptography and asymmetric cryptography. (See Table 4).
Cryptanalysis	Cryptanalysis is the surreptitious revealing of the contents of coded messages, breaking codes, decryption and analysis of codes, ciphers or encrypted text. It uses mathematical formulas to search for algorithm vulnerabilities and break into cryptography or information security systems.
Cryptologist	A cryptologist is skilled at deciphering codes, puzzles or cryptograms and at creating them in order to protect private information.

Table 5 – Fives stages of cryptography

At the beginning of this article, we started with the idea that the more complicated the puzzle, the more challenging the target and that hackers or villains view this as a challenge and an opportunity to showcase their achievements. It might help if we step back in time to reflect on Alan Turing – a mathematical genius and a cryptologist – who pioneered the breaking of the Enigma cryptographic machines code.

Turing was fascinated with puzzles and breaking codes. The more challenging a problem the more innovated he became. In 1950, Turing published the article 'Computing machinery and intelligence' followed by the Turing Test. The Turing Test proposed by Alan Turing was one of his best



works as he suggested that machines can think and be intelligent too. The Turing Test pioneered the concept that if a machine can impersonate a human and convince the other person involved in a real-time conversation that he is interacting with a human (not a machine), then the machine is intelligent. Turing's significant contribution to the field of artificial intelligence is believed to have started as early as 1950 with the Chatbot 'bot' movement.

If we return to the present, we know that blockchain records are blocks that are linked and secured together using cryptography. So, let us go back to the question – is it possible for cryptography codes to be broken? The answer is, it is very possible.

We are entering a new and fascinating stage with the advancement of artificial intelligence, cognitive computing, deep learning and the convergence between the physical and digital worlds. A world of persistent shared 3D virtual spaces linked into a perceived virtual universe. All of these advancements will entail constant challenges for new cryptograms for data security and privacy or we will be left unprotected and vulnerable.

Just as quickly as we create new cryptograms, the fascination with puzzles and code breaking will continue to spur others – the hackers and villains – to continue to look for opportunities to circumnavigate barriers, laws, technology, systems and execute the ultimate cyberattack.

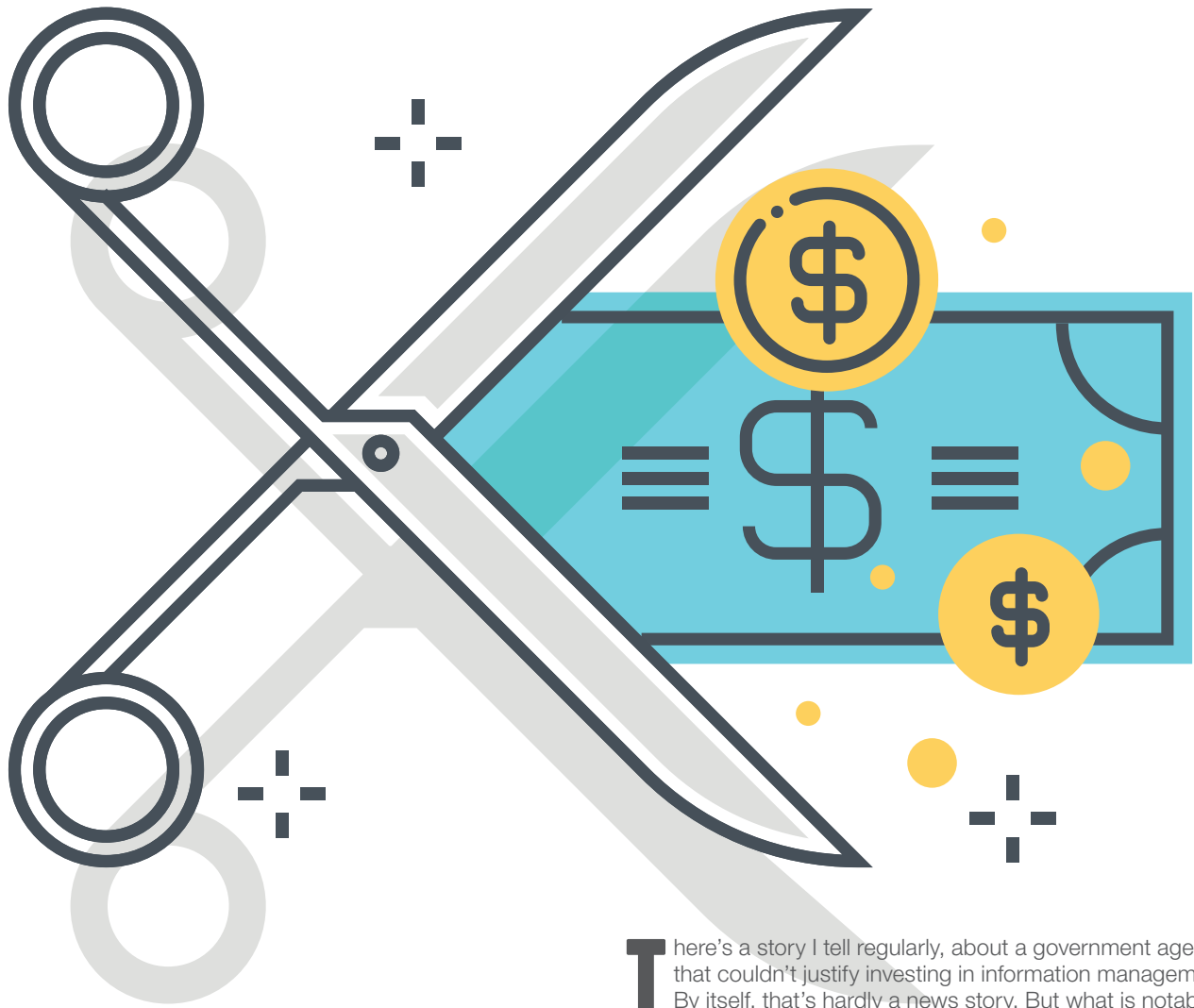
We are living in exciting and challenging times. In this new virtual universe, we will need new rules and new tools. ❖

ABOUT THE AUTHOR

Linda Shave is acknowledged as a thought leader and architect of change. She is a researcher, consultant and auditor in areas of virtual information asset management, business process management, cloud migration, corporate governance and risk management. Linda is a former CEO, CIO and a member of numerous professional organisations.



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Calculating the value of information

If you want to get senior management's attention, don't talk about compliance – talk about business improvement in terms of the value of information.

By Kevin Dwyer

There's a story I tell regularly, about a government agency that couldn't justify investing in information management. By itself, that's hardly a news story. But what is notable about this particular example is that the agency's immature information management processes could be clearly demonstrated to contribute indirectly to the death of people on a regular basis.

I don't tell the story to shame the agency in any way – in fact, I'm careful not to mention any names – but for its shock value. So far, it's the most effective way I've found to drive my regular audience of records and information managers to stop thinking in terms of system features and advantages, and get them to concentrate on the benefits to their organisation.

These same records and information managers frequently complain that they can't get senior management's attention. What I find is that they often don't consider how they waste their few chances to do so, usually by leading their pitch with the need for compliance, or system features. Senior managers have to juggle a large number of obligations and demands on their attention, and they will quickly tire of someone who keeps reappearing, only to tell the same story repeatedly.

Consider instead a conversation with a chief financial officer that begins this way: "How would you like to save \$1m in rework?" Or "Are you interested in ensuring you can easily maintain our current savings from self-insurance for workers' compensation?" Or a conversation with a human resources director that begins with "What benefit would we get from reducing recruitment times by 30-50%?"

Consider on the other hand a conversation with a chief executive officer that starts with "We're in breach of our national digital recordkeeping obligations!" Or "If we implement this software, we'll be able to leverage workflow and keep an audit trail for document edits."

Which one do you think will get a response beyond an agreement it is a good idea? Which ones will have questions

being asked of you about how it can be done? Which ones will have you invited to make a presentation rather than trying to shoehorn your way into an executive's already busy schedule?

The starting point for calculating the value of information and its mature management is to throw out the records and information mindset and move to a business improvement mindset.

Starting with a business improvement mindset allows you to think clearly about the value of information. That doesn't mean we throw out all the implications of good records management practices, but more let them have a back seat while we focus on business benefits.

There are several common business processes found in almost any organisation that can be improved with a properly functioning electronic document and records management system (EDRMS). They include but are not limited to:

- ◆ recruitment
- ◆ contract management
- ◆ any approval process that includes multiple authorisations
- ◆ meeting management
- ◆ workers' compensation claims
- ◆ asset recording and verification
- ◆ customer complaint handling
- ◆ enrolments
- ◆ employee performance management
- ◆ case management
- ◆ procurement.

If you consider how these things run in your own organisation, you might find that one or more of these processes are already managed by some kind of existing system. That system may already have delivered benefits to the organisation in terms of automation, efficiency, security, data accessibility, timeliness or accuracy. This could make it more difficult for you to make a case based around business improvement. It's my experience, however, that when you look hard enough, you can uncover large savings or reduced risk, or both.

The first step in calculating the value of information is to identify processes that are highly manual. There might be a lot of paperwork involved, or multiple emails that go back and forth. There might be a large number of process steps to wade through. Or perhaps several different roles are involved, or the process is high volume or labour intensive. Maybe there are significant adverse consequences if the process goes wrong.

Once you've identified and discussed a range of these processes with the business, work with one or two key people from the business to develop process maps. Use the post-it note technique of process mapping to make life easy, and you should be able to complete the task in an hour or so.

You can then analyse the process map for issues including but not limited to:

- ◆ wasted time, whether because progress can't be tracked or because information is inaccessible
- ◆ poor information security
- ◆ unnecessary steps in the process
- ◆ sequential steps in the process which could be run in parallel if the information were accessible by multiple parties at the same time
- ◆ manual sharing of information, e.g. by photocopying, manual transport, faxing, or emailing
- ◆ poor identification and tracking of versions of information
- ◆ storage of large volumes of manual records
- ◆ duplication of manual records stored in different geographical locations
- ◆ information regarding projects or contract negotiations that is distributed amongst personal and shared drives, and emails and email attachments.

Starting with a business improvement mindset allows you to think clearly about the value of information.



possible. This may include but is not limited to:

- ◆ public access to information through a portal, with a similar internal intranet setup
- ◆ automated internal and external processes
- ◆ improvements in teamwork when common access to information is possible.

The next step in the process is the key one, and it's not often expected of a records and information manager. It's to convert the benefit from qualitative to quantitative, in the form of a dollar figure. Labour savings, storage savings, and material savings are relatively straightforward to calculate.

Opportunity costs and the benefits of reduced risk to the organisation are not. Going through different methods of calculating benefit is beyond the scope of this article, but you may find that your audit function can help. They often have processes

they use to evaluate these more difficult to calculate benefits. They may also have audit reports that identify and perhaps quantify some of the issues you have come up with.

You should now be ready to mount a case through business improvement, rather than compliance. Using a dollar figure for the benefit in your discussions with senior managers is much more likely to get them asking questions about exactly how it is that you can deliver what you claim. If that happens, you are on your way to getting not only senior management endorsement, but getting one or more managers properly committed to your cause. Our research over the years has shown this is a prerequisite for successful implementations. ❖

Once that analysis is complete, run another workshop with people from the business who are well-placed to answer questions about the implications of these issues for the business in terms of:

- ◆ costs of storage
- ◆ opportunities lost because processes take longer than they should
- ◆ manual labour costs
- ◆ cost of disputes relating to uncertainty about information accuracy, for example for contract disputes
- ◆ increased rework due to inaccessibility of information (e.g. previous studies, current engineering drawings, contracts)
- ◆ costs of overpayment to vendors due to information being incomplete
- ◆ opportunities lost due to key individuals going on leave and their information becoming inaccessible
- ◆ the consequences of non-compliance with audits, for example self-insurance or financial audits
- ◆ the consequences of information not being accessible or accurate in an operational area which has practices that are higher risk in those circumstances.

This is by no means a comprehensive list. It does however, give an insight into the kinds of problems that may be overcome with a mature set of records and information processes and an EDRMS.

Once you have completed that workshop, it is time to dream of what is possible if you do have a functioning EDRMS and mature practices. Brainstorm with the business what is

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RECORDS AND INFORMATION MANAGEMENT FRAMEWORK: PRACTICAL STRATEGIC SAGACITY

How do you bring about practical RIM sagacity in your organisation? Consider putting a strategic records and information management framework together, to provide a solid structure and foundation that captures what RIM in the organisation is all about.

By Kaye England



We are all aware of the importance of a framework when building a house. Without a solid foundation and structure, the building will not be able to do that for which it was created: to shelter, to offer security and utilisation, and to provide a base – something to always come back to. So it is with a records and information management (RIM) framework. A strategic framework will provide a solid structure and foundation that encapsulates in one (visual) document what RIM in the organisation is all about. It covers all of the main principles and activities, in order to bring about practical RIM sagacity in the organisation.

A commitment to implementing an effective framework promotes records and information governance in the organisation. It is beneficial in disseminating strategies in line with legislation, standards, policies and procedures, reflecting the whole picture of a RIM program, in terms of both management and content services. Importantly, the framework must always be in sync with the vision, business activities and risk profile of the organisation as a whole. The document itself will provide a clear, succinct snapshot of the requirements to effectively manage RIM within the current compliance environment. Often it is a one-page graphic document, simple yet descriptive of the RIM framework.

Importantly, the framework must always be in sync with the vision, business activities and risk profile of the organisation as a whole.

A formalised RIM framework is important because it:

- ◆ provides an overall vision of the work of RIM
- ◆ prepares you for the 'what do you do' questions from internal and external stakeholders and clients
- ◆ points to underlying compliance obligations
- ◆ promotes formal policy and procedures
- ◆ protects and gives credence to RIM
- ◆ practically breaks down the why, what, where and how.

In order to construct your RIM framework, begin with the external and internal regime required for compliance. That is, the legislation, standards, policy and procedure surrounding RIM specific to your sector and location. Then focus on the strategies needed to drive compliance, breaking them down into practical pillars, for example:

◆ **Governance, policy and planning** – this underpins all that you do. Who and what are your reference points in terms of RIM governance? For example, State Archives Office, Chief Information Office, RIMPA, other organisational policy and procedure. What are your key

planning documents? Consider the strategic recordkeeping implementation plan (SRIP) and the operational plan.

- ◆ **Key resources and systems** – what tools and resources do you need in order to fulfil your RIM framework? This will include: retention and disposal schedules, business classification scheme, information management lifecycle, enterprise content management systems, recordkeeping roadmaps and specialised RIM staff.
- ◆ **Education and compliance** – marketing and delivery of training and education programs, a RIM compliance plan, local procedures and guidelines, consultancy services, help desk, surveys, statistical analysis and self-assessment.
- ◆ **Audit and reporting** – what lines of reporting do you need to follow? This will include, internal reporting, presentations and audits, annual reports as well as external reporting.

The RIM framework in an organisation needs to be organic; it will change often as a result of legislative and compliance requirements, but also as a matter of continuous improvement within the organisation and the RIM unit. As RIM professionals in the 21st century there is no doubt that our role can often be reactive, as we respond to issues. However, increasingly, we need to be proactive, always seeking ways to do RIM better, more efficiently and more effectively. This will be reflected in the organic nature of the RIM framework, always improving and changing, in order to bring about the ultimate goal of merging positive user experience with innovation, business effectiveness and compliance. ❖

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Kaye England has worked at the University of Southern Queensland (USQ) for the last 21 years in both the Library and Corporate Records. Both fields of work have provided Kaye with a keen interest in leadership and education with a strong focus on client service. Kaye has a Bachelor of Librarianship and Corporate Information Management (Distinction) from Curtin University and a Master of Information Studies (Leadership) from Charles Sturt University. Kaye is currently the Education and Compliance Officer (Corporate Records), USQ. ✉ She can be contacted at Kaye.England@usq.edu.au.



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A SHOCK TO THE HEART: CONTROLLING HUMAN FACTORS TO SUCCESSFULLY MANAGE INFORMATION

In this article, our author encourages you to consider the human factor in disaster preparation and shows how it can ultimately lead to success or failure when managing a crisis.

By Sunny Seregen

I invite you to pause reading for a moment and think about a time where you were under pressure or stressed and consequently did something really counterintuitive. You are likely to have lots of cringe-worthy stories to choose from because it is part of being human. We all have those moments where we 'lose our head' and do something that hinders rather than helps the situation.

In most cases, it is just a funny story to relate later. Occasionally though, and hopefully never, you may be faced by a scenario where making the wrong decision or forgetting something could have a serious impact. It could be the difference between a data breach being handled or escalating to the press, or thousands of pounds saved or lost in an effort to save your flooded record store.

BACKGROUND

Outside of my work as an information officer, I am a volunteer first aider where it is vital to understand how pressure impacts performance. I soon realised, my interest in how humans react to pressure could be relevant should an information disaster occur at work. In clinical settings, these hindering but natural responses to stress are aptly called 'human factors', which I will properly define in a moment.

I do not pretend to have any background in clinical studies beyond my own reading and experience as a first aid volunteer. Similarly, my experience of putting these theories into practice in an information management environment is unfortunately (or fortunately!) very limited.

However, there are some valuable lessons we can all learn from clinical studies into human factors. I will explain why it is worth considering and suggest some practical tools or steps that you can use in your own organisation. The article will remain purposefully top-level, so it is relevant for all types of information work. I also hope that it will start a conversation where you might find human factors a useful lens to examine conflicts or issues you face in your professional roles.

DEFINITION AND THEORY

Your mind reacting in an unhelpful and counter-intuitive way is something we all experience, it is part of being human and is the focus of human factors studies. The Clinical Human Factors Group has defined 'human factors' as "all the things that make us different from logical, completely predictable machines, how we think and relate to other people,

equipment and our environment. It is about how we perform in our roles and how we can optimise that performance to improve safety and efficiency. In simple terms, it's the things that affect our personal performance."

Human factors include being wary of leaders, not coping with stress, making irrational decisions under pressure, incorrectly using equipment but blaming the machine, and forgetting key parts of basic procedures. The kinds of situations we are talking about today may not be a matter of life and death but we all experience stress and the strange effect it can have on our ability to cope.

In a way the impact of stress and power dynamics between colleagues seem like obvious challenges in successfully managing a crisis. However, the problem is that they are so 'obvious' that people do not build them into training or disaster planning.

They may be soft skills but without those skills technical knowledge becomes redundant. For example, there is no point in knowing how to salvage every type of document if you cannot communicate that information under pressure.

An awareness of human factors can transform crisis management by providing a sense that the situation is being 'managed' rather than 'survived' and dramatically increases success rates. Both the medical profession and the airline industry have embraced the development and application of human factors management.

In clinical settings, studying human factors has inspired the development of a 'pit crew' approach to resuscitation. Emergency responders have considered what makes pit crews in car racing such effective teams and created a similar

... there is no point in knowing how to salvage every type of document if you cannot communicate that information under pressure.



set-up in resuscitation scenarios by learning 'leadership' and 'following' skills, identifying key roles before arriving at the scene and having specific set tasks. Areas that have begun to utilise these methods show astounding statistics. The pit crew approach in Kansas showed the rate of someone getting a pulse again nearly double. Seattle, having embraced this methodology, now boasts the highest save rate in the world where casualties have an approximate 50% chance of survival. Just to put these stats in context in some areas the out of hospital survival rate for cardiac arrests is 6%.

So let's move on to how we can use these skills practically as information professionals.

THE IMPACT OF HIERARCHIES

With the General Data Protection Regulation (GDPR) on the horizon in the UK it is more important than ever that we are prepared to effectively respond to and resolve data

breaches. If you are following the ICO's 12-point preparation plan for GDPR you will also, at some point soon, be reviewing your breach policy and procedures and so this is a good opportunity to ensure that human factors are ingrained.

If a breach occurs, at whatever level or whatever scale, it will be a stressful situation to manage. On one hand, you will be getting the breached data back under your control, blocking the leak that caused the breach, and correcting any issues that allowed the situation to escalate. On the other, you will have people to manage too whether they are the press, the people whose information has been affected or the staff who were involved.

I believe the biggest human factor that may impact the success or failure of breach management is the effect of organisational hierarchies. The good news is that this is something you can work on beforehand. In part this may be through constant self-reflection of how you interact with your

colleagues. Is there someone who you feel intimidated by or who you would feel obliged to follow their instruction even if it seemed wrong? Or perhaps there is a member of staff who you are frequently at odds with.

Many organisations have ingrained hierarchies in place and most of us throughout school and our working lives have been trained to respond to the hidden hierarchies around us. Human factors teach us to acknowledge where these hierarchies might have a negative impact under pressure, whether that pressure is through a breach or a disaster in the record stores. One of the best ways, perhaps, to prepare for such an eventuality is to have a meeting with everyone involved in business continuity to discuss roles and responsibilities, the escalation process and the command line.

For a new organisation this may be the first step in an establishing business continuity procedures. If your organisation already has formalised disaster recovery plans in place that use the Bronze, Silver, Gold command structure, I cannot stress enough the value in having refresher meetings and practice scenarios every so often. Importantly, it means you can fight out any hierarchical issues around the table with biscuits and tea, rather than in the middle of a flooded building or with the press banging on your door.

IRRATIONAL DECISION-MAKING AND REDUCED MEMORY

Having regular meetings to discuss your procedures is also an effective way of mitigating another human factor: irrational decision making and reduced memory. I imagine you would have experienced moments where you are stressed, and you forget something really key. This is normal behaviour, and, the worse the situation, the harder it is to logically think through things.

An example of this going seriously wrong was when two first aiders went to a cardiac rest. They had a defibrillator on them and followed the steps they had been trained in. Apart from one major slip-up where they forgot to plug in the defibrillator.

In response to incidents such as these the emergency services are now turning to written prompts that show simple algorithms to follow. These are not a replacement to training but give prompts in moments of blank panic. In a way the recordkeeping profession is already moving towards a similar answer as at a recent training course on disaster recovery,

the trainer emphasised the need to keep salvage plans short, readable and useable.

I completely agree and would take it one step further to suggest perhaps having diagrams to follow or simple algorithms, even if they are just for you to help manage the situation.

CONFLICT MANAGEMENT

The final human factor I wanted to focus on that goes across all types of disasters is conflict management. There are three degrees to conflict: discussion; disagreement and dispute. These reflect the way that someone questioning you can become more heated.

Recordkeeping professionals often face challenges as our work is seen as a hindrance so understanding how to approach conflict effectively can be used in non-emergency situations. Whether it is a discussion with a colleague or someone talking you down in a large meeting, you have to be able to respond professionally.

There is a three-step process to dealing with conflict.

First, you acknowledge what the person has said to show you understand it and are considering their suggestion. If you need time to think through what they have said, you can also stop them from becoming angrier by explaining that you are considering it.

The next stage is to assess value. As we have discussed above, when you are under this kind of pressure your memory is likely to become impaired and you will struggle to make a good decision.

Sometimes, knowing and acknowledging that you might feel like that will help you mentally prepare for such situations. It can also be helpful to talk about it, take some deep breaths, and try to make yourself logically think it through and/or use the algorithms in your pre-written plans.

Finally, you either follow plan A or plan B. Either Add to plan or Be assertive and take action. How you would do this is very specific to the situation you are in, but just remember you only have two options: to accept it or assertively dismiss it and that should make your next steps clear.

CONCLUSION

Human factors can, when first introduced, seem like something we take for granted, and is fairly obvious. However, there are proven results in acknowledging the way it affects us and our teams. By working through what might happen, we can mitigate the risk of human error and enhance our ability to deal with crises. I also believe, and hope I have shown you, that an understanding of how we react to pressure can help with every-day business by lessening tension between staff members and therefore increasing the acceptance of information management.

I titled this paper 'A shock to the heart' in part because of the obvious links with the resuscitation scenarios that I have drawn these theories from. However, it is also because I strongly believe that records management is a fundamental part of any business (however much our colleagues are loathe to admit it) and dealing with a breach or disaster in our precious record stores will be a shock to the very heart of our organisations. So, let's make sure we're ready. ❖

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WHAT'S WRONG WITH DAY BATCHING?

In this article, our author demonstrates that day batching is an effective and efficient method for storing hard copy records.

By Johannes van der Zant



The Queensland State Archives publishes a newsletter called *QSA Client News* (QCN) that is full of excellent articles and advice. In the December 2017 edition of QCN, there was an article entitled 'Day Batching ... the "Rules of Racing"' in which the Queensland State Archives gave a recap of its advice about day batching original paper records after digitisation (QCN, 2017). Summed up, this advice goes something along the lines of – structured files reflect best practice in records management, and batching by retention year has its problems, but is better than day batching which should be avoided at all costs.

The advice was first published back in 2005 and may have been excellent advice at the time. However, I'd like to provide a different point of view, which might give you something to think about next time you are walking through the file room, placing the day's correspondence into structured files or manually appraising hard copy to determine which retention year box you need to place it in. You see, I think day batching hard copy records is a better method and this article discusses why.

Most of the organisations I've worked with either maintain structured paper files, use retention year boxes or deploy a

combination of both, so I won't be surprised if this article is not immediately accepted. In fact, the mere suggestion that these practices are abandoned and replaced by day batching will cause so much angst in some people that they may stop reading this article immediately. It is not a comfortable prospect to consider changing one's mind about something believed in for so long. After all, change is hard for even the most adaptable. Asking committed advocates of a process to change from doing something that has been ingrained into their recordkeeping practices must seem ludicrous. Particularly if our archival authorities have opposed the practice.

To be sure we are talking about the same thing, I'll provide you with my definitions of the three approaches to hard-copy storage.

Structured files are paper files that represent a record series maintained in a business classification scheme (BCS). For each container in the BCS that stores the electronic version of records, there is a physical container that stores any corresponding physical records.

Batching by retention period involves grouping physical records into boxes by retention period. For example all the

records that have a retention of two years are placed together into a box that is presumed to be destroyed after two years. Permanent records are placed together into a box that is to be kept forever.

Day batching means to some that physical records are placed into a box according to the date scanned or received, but really grouping records together by the date scanned has no value and is a misnomer. Day batching is really just placing physical records into the next box that is being used that day, regardless of the scanned or received dates of the records in the box.

RETENTION PERIOD BOXING

I think that boxing by retention period has no merit, so I'll discuss this approach first with the intent of removing it from contention. Among the problems with retention period boxing is that when the retention period for a record class changes, each hard copy record in the class must be moved to a box that represents the new retention period and disposal date for the record. Some would argue that if the retention period decreases there is no requirement to move the record, because it is acceptable to keep records longer

than the minimum retention period. This is true – however, day batching is more efficient because the retention period automatically readjusts for the record with no requirement for manual intervention. This is because your eDRMS should determine the retention period based on the disposal authority applied to a class of record and not the box a record was placed in.

In September 2016, Queensland State Archives released the General Retention and Disposal Schedule (GRDS), which replaced Queensland Disposal Authority Number (QDAN) 249 version 7 – General Retention and Disposal Schedule for Administrative Records. The GRDS is an authorisation under s.26 of the *Public Records Act 2002* for the disposal of common and administrative public records created by all Queensland Government agencies. I commend Queensland State Archives for the work that went into the GRDS. It simplified the process of appraising records against the schedule and provided for the coverage of a vast number of record classes not previously covered by approved disposal schedules.

QSA provided excellent documentation to help agencies map the previous disposal authorities from QDAN 249 to the

GRDS (Queensland State Archives, 2017a). The organisations I work with were able to apply the changes to their recordkeeping systems within days. If your eDRMS doesn't allow for a simple process to update disposal authorities then you should consider changing products. By simple, I don't mean automated, I mean easy. It was still a manual process, but not a complicated one. From the documentation supplied by QSA, I extracted the data in the following table.

Retention period QDAN 249 v7 in years	Retention period GRDS in years	Record classes changed
0	3	2
0	5	1
0	7	2
1	7	1
1	5	1
2	3	2
2	5	4
2	7	9
3	7	5
3	10	1
5	7	20
5	12	2
5	Permanent	5
7	8	1
7	10	1
7	12	5
7	Permanent	2
10	Permanent	2
25	27	1
25	P	1
50	55	2
Various	Permanent	1
Total		71

What the table tells us is that retention period boxes, for the period in the first column of the table, should be checked to see if they contain records from classes that have had the retention period increased to the period in the second column. If so, the records should be moved to a box designated for the new retention period that is due for destruction at the appropriate time. The third column lists the number of record classes in the GRDS that had a change from retention periods from the first column to those in the second column.

I've come across agencies that don't know which individual records are in each box. All they know is that, at the time they were boxed, the retention period for each record in the box was the same. These agencies have at some time in the past been advised that, at the end of the retention period, the box can be destroyed without reappraising any of the records to make sure they have not been misclassified or that their retention periods have not changed. There is also a disassociation between the digitised copies of these records in the eDRMS and the original source hard copy. These agencies have been led to believe that it is acceptable to destroy hard copy records without destroying the digitised

copies. After all, doesn't everyone know that digital storage is cheap, and there's no harm in keeping everything forever, right? If your agency is like this, then – when you come to destroy a box – you will have to reappraise every individual record in the box to make sure it is able to be legally destroyed under a current disposal authority. There goes all the efficiencies that were hoped to be gained by retention year boxing.

Disposing of records according to the retention period box they are in also results in the partial disposal of files. If a file is open over a number of years, then it is likely that records belonging to the file are placed in different retention year boxes that are closed on different dates and will be disposed of in different years. It is not good recordkeeping practice to dispose of a part of a file (Queensland State Archives, 2017b). A partial file is at best clutter, as it becomes useless without the rest of its information. At worst, it can be misleading, providing an organisation with misinformation.

Potentially, the data in the table above could be used to adjust the disposal dates for each box. For example, if you have a one- or a two-year box, you could change it to a seven-year box. The biggest problem with this solution is that besides having to store hardcopy for years longer than necessary, there were ten record classes that had their status changed from temporary to permanent. If you keep five-seven- or ten-year retention boxes then you would have to keep them all forever and never be able to transfer them to an archival authority because archival authorities want structured files, not boxes full of disparate records (Queensland State Archives, 2017c).

Retention triggers cause havoc when boxing by retention period. The premise behind retention period boxing seems to be that the retention period count down is from when the last document is placed in the box and the box lid is sealed. For all intents and purposes, the disposal trigger is assumed to be the registration or creation of the record. When I worked through the GRDS to extract the data presented in this article, I found only one record class that had a disposal trigger of creation and it had a retention period of 90 days. The reality is that many record classes that have the same retention periods have different disposal triggers, so will fall due for disposition at different times, possibly years apart.

STRUCTURED FILES

Maintaining structured files for hard copy is very convenient. As soon as the file is required it can be retrieved in its entirety. The question is whether the convenience gained from maintaining a structured file is worth the overhead. Why do people need to hold a physical file in their hands? Surely users can print off a record if they want to hold it physically. Stamp it as a copy and shred it when finished. On the rare occasion when evidence is required that can only be substantiated by the original source hard copy, then sure, retrieve it. But only the individual document needs to be retrieved. The remainder of the structured file should remain stored safely behind locked doors in a compliant records storage facility.

When sending records to archival authorities or to offsite secondary storage, it is a requirement to have the hard copy records in structured paper files. But it is worth questioning when the best time to create the structured files is. There are three examples of the status of permanent record classes being changed to temporary in the GRDS. Admittedly these are records that were required to be permanently retained at the organisation, but they may have been destined to be sent



Maintaining structured files for hard copy is very convenient. As soon as the file is required it can be retrieved in its entirety.

to offsite secondary storage and therefore it seemed practical to store them as structured files at the time of capture. Now that they are temporary and can be destroyed, the effort to maintain them as structured files seems wasted. Not a strong example I grant you, but this does illustrate the possibility of permanent files having their status changed. The best time to create structured files is immediately before you need the structured file. If records can be legally destroyed before ever needing to be placed in structured files, why should we bother going to the effort of doing so. Pick them straight from their boxes and shred them. A shredder does not care if records have been neatly arranged according to their record class.

An issue with giving staff the physical file is that staff tend to place additional records on the file without telling anyone. These records are not discoverable unless someone decides to peruse the physical paper file. These records should be scanned and recorded in the eDRMS so they can become text searchable documents with additional metadata added. How else is the rest of the organisation going to know they exist? Ask your organisation's Freedom Of Information (FOI) or Right To Information (RTI) officers how they would like to have to physically check each physical file instead of the scanned records in the eDRMS.

Most of the files maintained in the organisations I work with are hybrids. They consist of hard copy records that have been digitised and records that are born digital so have no hard copy component. If someone is given a physical file, it will probably be only part of the file unless someone is going to the effort of printing digitally born records and placing them in the paper file. If your organisation does this, please stop. The idea of having an eDRMS is so we can manage our records electronically. Too many organisations are not using their technology to make recordkeeping easier. A lot of organisations have implemented an electronic system to

record after the fact, what they have been doing manually with their physical records. These organisations have failed with their eDRMS implementation. They have continued with their legacy recordkeeping processes and have only succeeded in creating additional tasks by having to record the outcome of their manual processes in their impressive and expensive eDRMS.

Another problem with maintaining structured files is that if records are misclassified, then they must be retrieved from the incorrect file and physically placed in the correct file. You may claim that records at your organisation are never misclassified but at the organisations I work with, we perform quarterly spot check audits on the BCS and every audit conducted turns up at least one record that has ended up in the wrong place. It's called human error and should be expected. Misclassification is easy to rectify if your systems are based on electronic structures and not based on physical structures such as paper files.

DAY BATCHING

Day batching is the quickest method for storing hard copy records. The process involves placing a record in a box and recording the box's unique identifier against the record in your eDRMS. It is simple to retrieve the record when on the rare occasion staff require to hold the hard copy in their hands. When the record is returned, it is simply placed back into the current box being used to store hard copy records after digitisation.

Some organisations argue that they day batch, but only for records that have the same disposal authority and trigger. For example, they may day batch all the finance records together. This isn't really day batching. It equates better to maintaining structured files. Just because the container is a box instead of a paper file doesn't mean the records are being day batched.

The main criticism for day batching is that it is an inefficient



Any criticisms of day batching most likely stem from eras when manual, paper-based systems were the only solution to effectively managing records.

use of storage space. This probably stems from the idea that either the whole box must be retained for the longest retention period of any record in the box or that the box ends up being partially empty until the last record is removed from the box for disposal. I think the disposal methodology rather than a day batching methodology is responsible for this inefficiency. When a day box is partially empty, we just process more records into it until it is full again. Waiting until every record in the box is due for disposal before disposing of the records or not reusing the space in a box as it empties seems to be the cause of the inefficiency.

WHICH APPROACH IS MORE EFFICIENT?

I did a statistical analysis of a Queensland agency's eDRMS to determine whether it was more efficient to place hard copy records into structured files at the time of capture or to retrieve them from day boxes at the time of disposal. I made two assumptions when producing the statistics to ensure I wasn't giving a perceived unfair advantage to day batching. The first assumption made is that hard copy would be placed into structured files at the end of the day's processing so that when multiple documents are meant for the same file it would only be retrieved once for the day. The other assumption is that at disposal time, each record series would be processed individually so that economies of scale gained by disposing of multiple record series at the same time would be ignored.

The following table sums up my findings.

File plan	Total record series	Structured file puts	Box gets	% more efficient
BCS	4138	12769	9544	25.26%
Other	790	799	2941	72.83%
Total	4928	13568	12485	7.98%

Of the 4138 record series in the BCS, only 52 would have been more efficiently maintained as structured files. An overwhelming 4086 record series in the BCS were more efficiently maintained by day batching.

The 'Structured file puts' column is the number of times someone had to locate a structured file to place records in it at capture. The 'Box gets' column is the number of time someone had to locate a box to retrieve records for disposal. The BCS file plan is based on functions and activities. The other file plans were legacy file plans no longer used for capture and are subject based.

Day batching was 25% more efficient than using structured files for records classified in the BCS. Using structured files was an overwhelming 73% more efficient than day boxing for the other file plans. These are legacy file plans that date back to when emails were printed and stored in boxes as original records even though they had been digitally born. This may be evidence that in the past, when paper based recordkeeping systems were the only option, structured files were the best way to go. Now with the advent of the eDRMS, I believe it is time to consider day batching as a more efficient method of storage.

The subject files in the legacy file plans analysed contained disparate records covered by multiple disposal authorities and have their own inherent disposal challenges regardless of whether or not the hard copy was stored in structured files. There was also far fewer record series in the other file plans as

compared to the BCS and when all file plans are combined, day batching was still 8% more efficient overall.

CONCLUSION

In this article I have tried to demonstrate that day batching is an effective and efficient method for storing hard copy records. Any criticisms of day batching most likely stem from eras when manual, paper-based systems were the only solution to effectively managing records. What may have been a valid argument for alternative approaches no longer holds true in an age where electronic solutions to record keeping make the task of controlling our records so much easier.

Maintaining structured files provides for a convenient way to retrieve entire record series. There is nothing wrong with choosing to maintain structured files, but the decision to do so should be informed with balancing the few benefits against the increased overhead incurred.

Retention year boxing is an approach to storage that cannot possibly deliver on what it promises. In effect, provided the box that a hard copy record is stored in is known, retention year boxing is the same as day boxing, only with the useless extra burden of determining the disposal date of a record by assuming the trigger for its retention period was when the box will be closed.

If your organisation is maintaining structured files or retention year boxes, it might be worthwhile reviewing your recordkeeping systems and technology. A well-configured eDRMS combined with thoughtfully designed procedures and processes results in far less effort to achieve far better outcomes. An eDRMS should not be a ledger that is maintained to reflect the manual efforts of your record keeping. It should be the powerhouse that takes away the lion's share of the effort to control your records. ♦

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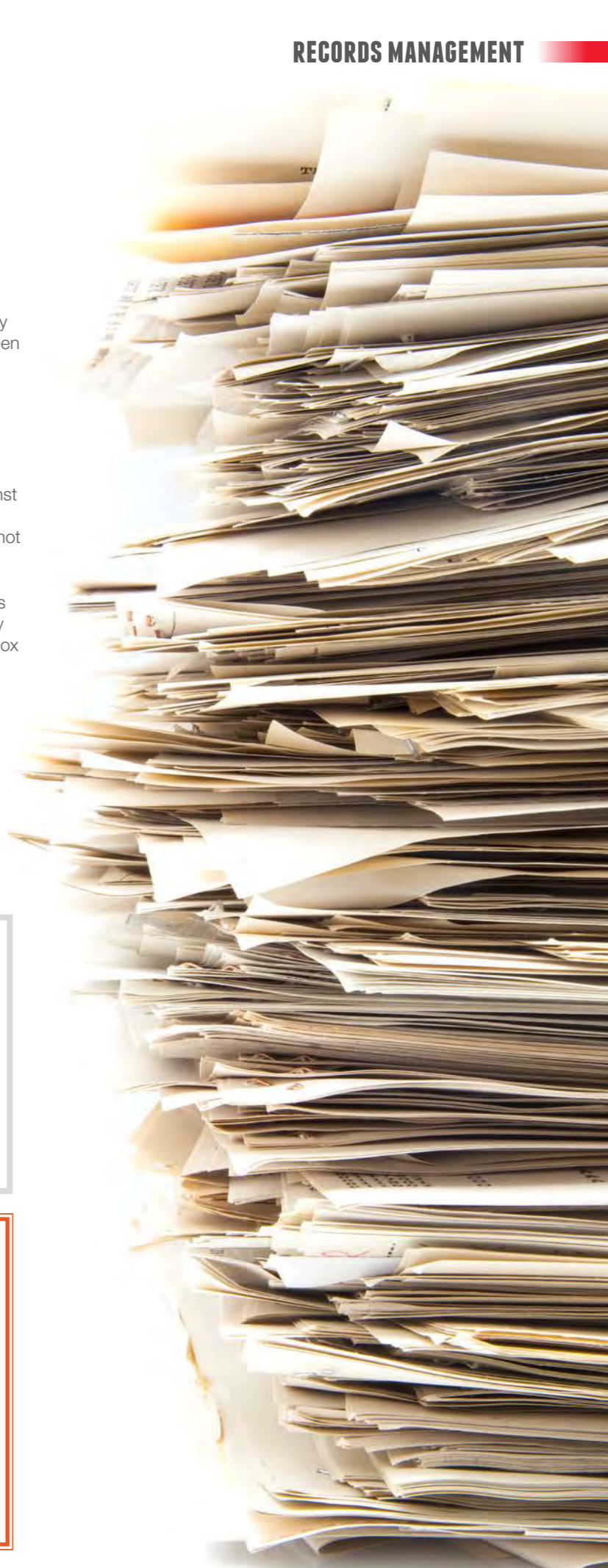
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CAPACITY BUILDING THROUGH DIGITISATION: CASE OF THE ANC ARCHIVES

This article is based on a study which assessed if the digitisation team of the African National Congress (ANC) was competent to carry out a digitisation project. The study findings revealed that ANC archivists were not trained on digitised archives systems. They relied on donor assistance from the Multichoice and Africa Media Online in developing the digitisation infrastructure. The study concluded that archival institutions should collaborate and form partnerships, and that the exchange program should be encouraged among archival institutions.

By Sidney Netshakhuma

Pickover (2007:11) stresses that it is important to establish mandates regarding how to coordinate, build capacity and transfer skills locally in relation to digital projects. Collaboration and partnership between the ANC, Multichoice and Africa Media Online contributed to the sharing of skills and knowledge. The ANC team benefitted from the project because they were taught technical skills from other project members. This enabled the ANC member to understand technical skills pertaining to digitisation. There is a need for high-quality resource materials to support capacity building. The purpose of this study was therefore to assess the ANC competencies during the digitisation project, and the skill levels of the digitisation project team.

BACKGROUND

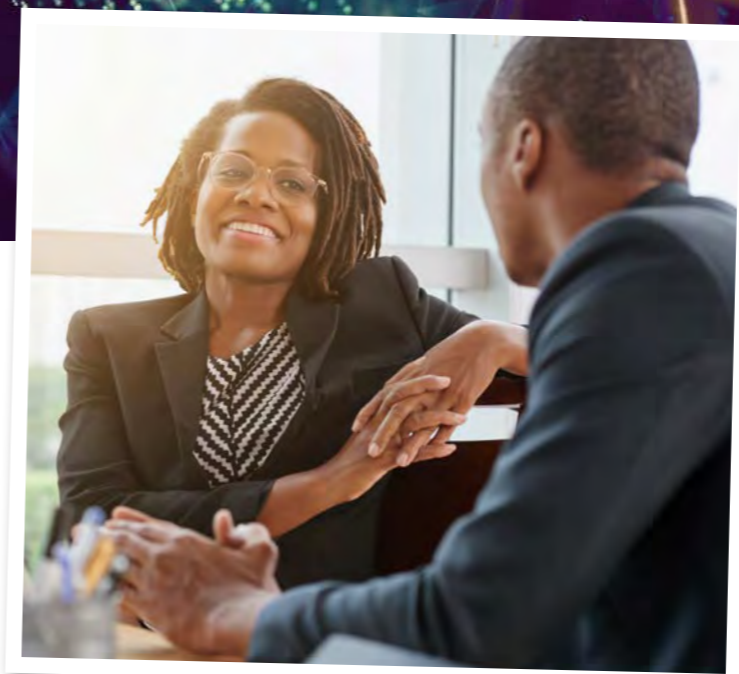
Most of the digitisation projects in Africa were not successful because of lack of capacity building. According to Sloyan (2016) the lack of technical knowledge of archivists was a hindrance to digitisation. Wei Wei (2002:70) asserts that, in Europe, most archivists do not have the technical knowledge in digitisation. According to Katuu (2015) digitisation was a new concept for many archivists in Africa.

There were shortages of skilled staff which led to the delay of digitisation projects. IRMT (2008) states that there was a lack of skills and competencies among archives personnel.

Lihoma (2008:7) indicates that there is a lack of suitably trained and qualified archivists in digital archives in the eastern and southern Africa region. In this article, digital archives is referred as a collection of digital documents. Therefore, the Southern African region needs to consider taking action in educating staff on the management of archives, otherwise digital archives are under serious threat.

CAPACITY BUILDING

During colonisation, Europe managed and controlled African archives administration. Asogwa (2012) argues that the colonial administration did not transfer archive skills to the African population. Lagardien (2015) alluded to the above argument and said that because colonial imperialists did not enact strong and credible archival legislation in their colonies, physical facilities were not up to standard. These weaknesses in early archival laws had some implications for archival development in Africa. IRMT (1999) states that it created a challenge regarding the appraisal, disposal of



records and transferring of records. Importantly, the early archival laws contributed to inadequate archive infrastructure in Africa. There was increased recruitment into the public service and rapid promotion of inexperienced personnel, which weakened the established archives. Asogwa (2012:199) observes that 'there was not much incentive for countries to maintain archives'. After Africa had gained independence,

most of the established national archives found themselves in a challenging situation because of the high staff turnover.

Studies by Tough (2009:190) and Lihoma (2008:7) argue that low salaries rather than low skills in the public service contributed to this high resignation rate. The ANC experienced high resignation rates of highly qualified staff who took up employment in other institutions that offered high salaries. Lihoma (2008:7) asserts that high staff turnover was largely due to lower remuneration packages.

Sutton (2004:3) and Asogwa (2011) contend that archivists in African institutions were not as technically skilled and competent as their European counterparts. There were few or no countries in sub-Saharan Africa where archivists acquired all competencies required for digitisation. In effect, ICT presented a number of challenges and difficulties and increased the risk of losing data and records as well as the risk to the reliability and authenticity of e-records, the loss of security and privacy, and increased costs of managing archives.

Currall and Moss (2004) observe that the nature of funding streams for archives was such that capital costs were the subject of the award, while no provision was available for



'Capacity building' in this context is defined as the enhancement of the ability to undertake certain activities, solve problems and achieve objectives.

maintenance. The maintenance costs of digital records were higher. Lihoma (2008:7) asserts that the digitisation project relied on external donors, for example, Malawi received funding from the European Union. However, the fund excluded maintenance thereafter.

Wei Wei (2002:70) indicates that shortage of professional training in archival principles is a problem. Garaba and Ngulube (2010) concur with this when they said that the training of archivists on digitisation has not satisfactorily reflected the changing environment vis-a-vis the curricula. Furthermore, Asogwa (2012:202) asserts that there is a low level of trained professional in Africa.

Harvey and Mahard (2014:28) mention that the recognition that new skills are required for digitisation has led to the development of courses through which students can learn digitisation skills. Garaba (2010:133) asserts that formal education is a fairly new phenomenon in most academic institutions in southern Africa.

The successful development and implementation of a digitisation program requires collaboration between institutions to share skills and knowledge. The ANC partnered with Multichoice and Media Africa Online Company for digitisation. Garaba (2010:67) indicates that, 'the memorandum of understanding between University of Connecticut and the ANC established a number of initiatives, including the creation of the ANC Archives project'.

Harvey and Mahard (2014:20) aver that collaboration is necessary to ensure preservation. Yeats (2005:140) remarks that 'collaborative digitisation projects are complex and that, for comparative assessment to be useful, it needs to be

open and include certain cross project themes'. Accordingly, stakeholders were involved in the planning of digitised liberation archives. Yeats (2005:143) indicates that it had been considered to include all stakeholders to maximise community benefits, limited by lack of awareness and understanding, risking low quality services, paying attention to funding issues rather than quality planning.

Implementation of a digitisation strategy requires human, capital and infrastructure resources. Baptista and Ferreira (2007:96) remark that preservation strategy interventions involve resources. The challenge regarding implementation of a digitisation strategy pertains to the availability of technical expertise of a preserving institution, the financial commitment and the allocated technological infrastructure. If the repository staff lack the necessary skills and resources, it leads to reduced efficiency, poor decision-making, mistakes and information loss.

There was a need for capacity building in terms of language. Some of the liberation archives were written in a foreign language. Mallan (2006:213) indicates that 'it is essential for institutions to consider that vocabularies required to access digital collections may privilege affluent members of local and global populations'.

The lack of digitisation capacity has been a critical factor regarding the inability of organisations to develop appropriate strategies. Furthermore, Harvey and Mahard (2014:4) note that a challenge regarding digitisation is caused by obsolete technology, fragile technology and inadequate resources.

Asogwa (2012:203) feels that the problem of archives management in Africa is that it does not meet the global standards of ISO 15489. The ISO 15489 clause on training states that any organisation that adopts the standard should establish an ongoing program of records management training.

Asogwa (2012:203) contends that, in Africa, the leadership does not provide adequate funds, facilities and infrastructure

for digitisation. McLeod and Hare (2005) indicate that leadership was the factor that impacted most on the ability of an organisation to move forward in managing digitised records.

Importantly, Asogwa (2012:15) states that much financial involvement was required for maintaining archives, and the software and hardware, if these sources were to be accessed in the future. Furthermore, in Africa, most archivists were not trained professionally in archives management; rather, they were recruited although they only had secondary school-leaving certificates. Asogwa (2012:203) affirms that the major challenges facing archives institutions in Africa are inadequate personnel who are not trained in archives management.

REFLECTION

The challenge of digitisation has impacted on the archival profession because some archival principles like records lifecycle and records continuum need to be reassessed (Heazlewood 2000:174).

Capacity building on digitisation must adopt a theoretical stance. For the purpose of this article, the capacity building is based on the International Standard ISO 15489. The ISO 15489 framework sets out the basic elements that need to be in place for organisations to effectively manage their archives. Organisations should commit resources to ensure strong oversight of archives at the senior management and information expert level. Millar (2004:12) states a need to ensure resources and training, awareness and ownership is done.

Capacity building includes the need for improved education and training of archives personnel. However, the meaning of 'capacity building' in this context is defined as the enhancement of the ability to undertake certain activities, solve problems and achieve objectives. Education and training on digitisation will enhance skills and knowledge of records managers and archivists. According to Cherie (2011:110) archivists must have a broad range of technological skills accompanied with a comprehensive system.

According to Okello-Obura (2011) the framework of laws and regulation, policies and systems determine how archives should be managed. This requires the following standards:

- ◆ Legal and institutional framework
- ◆ Responsibilities
- ◆ Training and competencies

According to the International Council of Archives (1997), archives specialists need to be equipped to meet the requirement of the law environment. This requires them to understand and apply international good practice standards. Millar (2004:12) argues that a new approach to professional education is essential to creating and preserving archives. This can be fulfilled through the following:

- ◆ Understanding international standards for archives management
- ◆ Assessing the gap between required and existing expertise
- ◆ Developing a strategy
- ◆ Securing budget support

RESEARCH METHODS

This article used a qualitative research approach. The

decision was based on the research question and the nature of the data that the researcher needed to collect and analyse.

The purposive sample was used for this article. The researcher selected a sample based on knowledge of ANC, Multichoice and Africa Media Online. The sample for this study included five ANC archives staff members and four digital archivists from the Multichoice and Media Online who were involved in the digitisation project of the ANC.

DATA COLLECTION TOOLS

This article used interviews, observation and document review as data collection instruments. The interview schedule was focused, open and brief, but allowed exploration of the participants' experiences through the generation of questions.

Data were collected through personal interviews and visits to the University of Fort Hare ANC archives repository to observe digitisation processes and reviews of ANC documents. Data were integrated to gain depth and insight into the ANC archives.

DATA ANALYSIS

To assess the level of skills for digitising the liberation archives of the ANC, participants were asked about their competencies to carry out a digitisation program effectively.

The participants reported that they lacked training in digitised technology system. Furthermore, the participants indicated that preservation of liberation archives in the long term was seldom regarded as an issue to take into consideration when studying archives. The findings revealed that archivists were not trained to use the digitised archives system. All the participants were concerned that without adequate technical knowledge regarding the use of the digitised system, the confidentiality and accuracy of liberation archives could be compromised.

The project team were expected to possess archiving skills. In this regard, the participants were required to hold appropriate archives qualifications. The participants from the ANC, Multichoice and Africa Media Online indicated that they had bachelor's degrees in archives management. In addition to appropriate training in archiving, the project team should have the technical capacity to deal with digitisation technology.

The researcher observed that the identification of records with historical and archival significance was a major challenge. The participants indicated that they did not understand the technology of digitising collections and metadata descriptions. In effect, it became clear that digitising the historical archives was a major challenge.

According to Garaba (2013), technological obsolescence and the lack of resources were major threats to the survival of digital archives. One trend identified during observations in the ANC archives was that there was a strong reliance on donor assistance for the purchase, maintenance and development of the digitisation infrastructure.

LEVEL OF SKILLS FOR DIGITISING LIBERATION ARCHIVES OF THE ANC

The fact that liberation archives are historical records imposes a heavy responsibility on those who manage them. Wamukoya and Lowry (2016:158) argue that there is a general lack of expertise in the field of digital management as organisations invest in purchasing information technology and not in the training staff. The level of skills for digitising liberation archives of the ANC cannot be overemphasised.

It was observed that ANC archives projects members had a qualification in archival science; however, the participants stated that the qualifications curriculum did not include the digitisation process as a module. The findings revealed that ANC archivists were not specifically trained to use a digitised system. The findings indicated that even though participants had the educational background, they lacked experience in digitisation. Sigauke and Chabikwa (2012:19) observe that it is important to have technical experience to make a success of managing digitised records.

The digitisation project team from Multichoice and the Africa Media Online Company had training in various aspects of archival management and some of the members held bachelor's degrees in information systems.

ANC archives facilities were dependent on the donation of infrastructure from Multichoice and Africa Media Online Company. Sigauke and Chabikwa (2012:18) point out that digitisation requires funding because hardware and software have to be upgraded frequently at a very high cost.

The ANC should assess the level of skills of employees who embarked on digitising liberation archives. According to Moulaison and Corrado (2014:56), the categories of human resources skills needed for digital preservation can be grouped into technical and metadata. The digitisation project relied on skills from the private sectors; Multichoice and Africa Media Online.

When an organisation relied on external stakeholders, it led to project delays.

Importantly, archival science curriculum development in South Africa should include digitisation as a module. According to (Bastian, Harvey, Mahard & Plum 2010:243), the practice of preservation needs to move from their traditional association with physical objects to accommodate the challenge of digital information.

It was proven during the digitisation project that ANC archivists lacked technical knowledge. According to Garaba (2012:29), the ANC does not have the capacity to cope with ever-changing technologies. There is a need to benchmark the management of archives with best practices. Archival institutions should collaborate and partner with other organisations. Furthermore, there should be an exchange program between institutions.

The lesson learnt in the absence of professional archives input pertains to the risks associated with the outsourcing of key information tasks to staff who are not trained in archives management. The transforming effects of technology on archives have challenged archivists in management professions.

Archivists should be trained to function effectively as information managers who should be conversant with the global trends in the digitisation of archives. According to

The findings indicated that even though participants had the educational background, they lacked experience in digitisation.



Garaba (2012:29), the archivists of the future will be recruited from the school of ICT. There should also be an increase in the level of funding of staff training for the organisation.

Sigauke and Chabikwa (2012:19) observe that it is important to have technical experience in order to make a success of the management of digitised records.

CONCLUSION

Consideration should be given to selecting personnel who are properly qualified in digitisation. For future projects, the ANC should employ archivists with technical knowledge. There should be a plan to ensure continuous development of staff in the management of archives. Public/private partnerships should be encouraged. ❖

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INFORUM 2018 – INVITATION TO ATTEND

It is with much pleasure as the Chair of Records and Information Management Professionals Australasia (RIMPA) that I invite you to join us at inForum – our premium annual event – being held in Hobart from 9 to 12 September 2018. inForum returns to beautiful Hobart after making its first appearance there 17 years ago in 2001. Interestingly, in 2001, the Convention theme was ‘Convergence 2001: Recordkeeping in a Digital Age’.

At the time, the convention organisers were forward-thinking and very much aware that the digital age was imminent. Although, I don’t think anyone could have predicted the massive explosion of data or information in digital form that is now being generated, used and consumed by countless people each minute of every day.

Who knew in 2001 just how reliant businesses and individuals would become to search and retrieve information on smart phones, laptops and many other devices?

Good governance and leadership is ever critical as we move forward in meeting the challenges before us. As such, it is not surprising that the digital world is once again the focus at inForum 2018, given the issues that confront us in managing the huge volumes of information for the good of organisations,

individuals and society.

inForum 2018 offers presentations aimed at varying levels of expertise ranging through tactical, operational and strategic. We have sourced a variety of extremely interesting and informative speakers who will tackle the digital world from a range of different angles including a futuristic look into what is about to pounce on us as records and information experts.

There will be workshops for you to provide input into the review of recordkeeping qualifications being undertaken by the Federal Department of Education and Training and an update on the IT21 standards.

Of course, there is also the trade exhibition – with traditional and new vendors – where you’ll be able to learn more about updated products and services being provided by vendors in the information management industry.

We invite you to join us at the various social events on offer at inForum 2018 and take up the opportunity to dress up for our Black Tie Gala Awards Dinner. I look forward to seeing you there.

Thomas Kaufhold MRIM Life
RIMPA Chairman of the Board



BENEFITS OF ATTENDING INFORUM 2018

inForum is renowned as the premiere education and networking event for Records and Information Management Professionals Australasia (RIMPA).

The annual convention exists to actively encourage, support and assist individuals and businesses in the information industry. Each year, hundreds of delegates attend inForum to develop and broaden their industry knowledge and receive ongoing professional support in line with RIMPA’s strategic objective.

BENEFITS OF ATTENDING INFORUM 2018

- 1 Learn new information from local and international cutting-edge presenters and keynote speakers.
- 2 Attend informative and interactive workshops facilitated by industry game-changers.
- 3 Learn about ground-breaking technologies that can help grow and enhance your business.
- 4 Exchange ideas and receive immediate feedback from industry experts.
- 5 Gain information about important facts, statistics and new trends that will give you a market edge.
- 6 Network, network, network! Make new contacts and rub shoulders with industry influencers.
- 7 Earn CPD points!
- 8 Collect world-class presentation materials to use later for reference and study.
- 9 Meet and mingle with key trade working at the fore of the information industry.
- 10 Interact with colleagues and peers at popular social events including the Gala Awards Dinner.



AWARDS 2018: NOMINATIONS ARE NOW OPEN

RIMPA presents a range of awards each year at our annual inForum convention. Some awards are by nomination, others are on merit. Nominations for all awards close 30 June.



Iron Mountain *iQ* Article of the Year Award

Any current financial member who submits an article to *iQ* between September 2017 and August 2018 is automatically placed in the running for the Iron Mountain *iQ* Article of the Year Award.

Have you considered writing an article for *iQ*? Articles (of at least 750 words) can be submitted on any topic loosely related to RIM and also gain professional members CPD points.

The winner will receive \$300 in RIMPA dollars.

There is still time to be considered for this year's awards, send your article submission to editor.iq@rimpa.com.au.

INDIVIDUAL CONTRIBUTION AWARDS

Do you know a professional member (i.e. holding Associate, Chartered Member or Fellow status) of RIMPA who has achieved highly or contributed greatly to the profession?

Email their name and the details of their achievement to jo.kane@rimpa.com.au.

For more information: <http://rimpa.com.au/grants-and-awards/industry-contribution-awards/>

INDUSTRY CONTRIBUTION AWARD

Introduced in 2014, these awards recognise industry contributions by RIMPA professional members.

Nominations can be submitted by any member of the Association, however every Branch Council should submit at least one nomination per year.

Nominations must include a brief supporting statement about the nominee and their nomination (ie, what is their contribution to the industry, where, when, how long, etc).

Areas where awards could be awarded include (but are not limited to):

- ◆ Involvement with Standards/Education
- ◆ Contribution to Standards/Governance/Strategy
- ◆ Involvement in Leadership/Mentoring
- ◆ Contribution to Local Government
- ◆ Contribution to the Company or to a specific Branch

Nominations (which do not require a nomination form) should be emailed to jo.kane@rimpa.com.au

J EDDIS LINTON AWARDS 2018

The J Eddis Linton Awards 2018 are open for nomination, in six categories:

INNOVATION

Sponsor: Information Proficiency

The J Eddis Linton Award for Innovation recognises leadership through the practical application of innovative solutions for new and existing market needs resulting in a commercial, environmental and/or social benefit.

COLLABORATION

Sponsor: EzeScan

The J Eddis Linton Award for Collaboration recognises an exemplary skills development collaboration between a department, employer or industry body and, at least, one other stakeholder (including vendors and consultant).

IMPLEMENTATION

Sponsor: FYB

The J Eddis Linton Award for Implementation recognises organisations that have achieved outstanding results through excellence in implementation of a project.

BUSINESS BENEFIT

Sponsor: Information Proficiency

The J Eddis Linton Award for Business Benefit recognises organisations that have achieved outstanding success for business improvement.

STUDENT

Sponsor: Records Solutions

The J Eddis Linton Award for Student recognises students who have achieved excellence in educational studies in RIM.

The winner of each category, in addition to being recognised for their excellent contribution to the industry, also wins a prestigious wall plaque and \$500 in RIMPA dollars (i.e. credit to be used to purchase event attendance, membership or items from the online store).

For more information about the awards go to: <http://rimpa.com.au/grants-and-awards/eddis-linton-awards/>

RIMPA dollars (i.e. credit to be used to purchase event attendance, membership or items from the online store) - \$500 for Lintons, \$300 for Iron Mountain *iQ* Article of the Year

JIM SHEPHERD AWARD

Named in honour of one of the Association's founding fathers, this award recognises long-term value towards RIMPA, industry / profession development and/or industry / profession co-operation and is presented in two categories: RIMPA Branch and Vendor.

- ◆ **Branch Category** – Chosen based on the Annual Branch Scorecard
- ◆ **Vendor Category** – Recognises long-term value towards RIMPA, industry / profession development and/or industry / profession co-operation by a vendor.



RIM and the WA Transport Portfolio:
THE TIMES THEY ARE A-CHANGIN'



Who remembers the tea lady? Or should we say information expert? Once upon a time, if you wanted to know something about anything, the tea lady was the go-to person in an organisation. How times have changed! In this case study, our authors look at how life for the information expert has changed over time in the Transport Portfolio in Western Australia.

By Maree Brennen and Mimma Sardi

Main Roads Western Australia (MRWA) and the Department of Transport (DoT) both have a long history, dating back to the 1920s and 1930s. DoT and MRWA, together with the Public Transport Authority (PTA), form part of the WA Transport Portfolio. The WA Transport Portfolio was formed in 2009 to coordinate WA's transport operations, regulatory functions and policy processes. A director general was appointed to head the three agencies.

FUNCTIONS OF THE AGENCIES

The functions of the agencies are quite diverse.

DoT delivers its services through two divisions – Policy, Planning and Investment (PPI) and Transport Services. PPI provides strategic transport policy, integrated transport planning solutions and coordinated investment decisions in collaboration with key stakeholders, to assist in the development of a safe and sustainable transport system for

the movement of people and freight. Transport Services leads and manages the state-wide delivery of a number of specialist transport services, including driver and vehicle services, coastal infrastructure, marine and rail safety, while also regulating WA's on-demand transport industry.

MRWA is responsible for building WA's major government road infrastructure projects; improving road efficiency; maintaining WA's major roads, bridges, verges and reserves; managing networks to provide traveller information; and managing a safe and efficient main road network.

While transport is the key function, each agency manages completely different aspects of transport. The functions undertaken as part of human resources, finance and administration may be similar.

RECORDS MANAGEMENT ACROSS THE PORTFOLIO

As the agencies don't all use the same electronic document records management systems, interoperability is not

currently possible. In terms of records management, this has ramifications with respect to business classification schemes and current retention and disposal (R&D) schedules where one size does not fit all and collaborating between agencies can be a challenge.

The Transport Portfolio is not what one would consider to be static. A static portfolio is one where collaboration could work quite easily that is; where R&D schedules have been produced for a whole portfolio and streamlining of other processes have also been undertaken.

The risks involved with having portfolio-based R&D schedules and classification systems is that, if the portfolio is subject to change, these would have to be amended each time. However, it should be mentioned that even in static portfolios, ministers' change and each have their own ideas, reforms and plans. A change in minister can create a huge change in the portfolio in some cases. The only certainty is that nothing is certain.



Once upon a time, keeping everything forever, or for longer than is required was standard practice for some government agencies. R&D dedicated staff members were unheard of in the early days. Disposal programs and 'culls' were undertaken when time permitted and/or when funds were available to undertake the task – often when the department was out of space.

Over the last three decades, records 'basics', along with the positions and roles of the people managing those records, have changed considerably in government agencies. In some instances, the basic functions have not changed, they have merely moved with technology.

For example, the bring-up system is still being used, but is now referred to as an electronic file request. The system was meant to eliminate the need for files being held onto for long periods of time; instead the file could be requested as a 'bring-up' as needed. It is basically a future request for a file to be delivered to the employee and can be set years in advance and/or on a recurring basis. This practice has been around for many years and the name has stuck and is still used today.

Previously, requests required written forms, visiting the central records area or contacting the Records team via phone. Paper forms were used to request a file whereas a file can now be requested electronically.

While some processes are still the same, they have

been modernised. For example: the keeping of time and attendance records. Previously, sign-in cards, time clocks and/or flexi sheets were completed by hand. Both MR and DoT have moved to electronic timesheets stored in an electronic recordkeeping system – the concept is the same but functionality is different and has moved with the times. As such, we have progressed with technology and tried to go paperless – however, this has not always worked. For instance, some people will still record times on a post-it note to be transferred at a later date into the system.

CHANGING TIMES

Who remembers when correspondence came through one entry point – the Records team? Records staff opened, sorted, indexed mail, attached correspondence to the appropriate file, hand delivered it via the trolley run and then eventually filed it. At DoT, mail sorting has been outsourced for over two years. The mail is delivered to our main offices where the IM staff transfer to the appropriate pigeon holes awaiting collection by the business units. Indexing is still undertaken, but this is usually now delivered electronically using workflows and the original hard copy batched (filed).

However, correspondence is no longer limited to hard copy and can enter the department from many different access points. Emails get delivered directly to employees' inboxes

and large documents are shared via online file transfer programs, such as Dropbox. This has meant that IM staff are becoming enablers as responsibility for the correct capture of records is being placed on all employees rather than being restricted solely to IM staff. A consequence of the increase in digital communications has seen a proportionate decrease in hard copy. Forms are now more likely to be available online and so the information is being stored as data rather than being received as hard-copy records.

With the advent of electronic document and records management systems (eDRMS), automated workflows are becoming a more acceptable and efficient way of undertaking some business processes. A workflow is basically a series of actions that have been automated and can be used for purposes including reviewing documents and processing approvals. At DoT, we also use workflows to progress correspondence and customer feedback. The workflow allows you to create and define routine business process tasks. Once a workflow has been created, it can automatically monitor your tasks, monitor other people's tasks, remind you to complete a task (within a set timeframe) and alert you that someone else's task is overdue. Workflows also capture searchable audit trails and provide a transparent and comprehensive history of the processes undertaken.

The days of a wet signature being required for documents may soon be over. I'm sure everyone is familiar with creating a document in an eDRMS – printing and getting the document signed by one or more people – then subsequently scanning the document and storing it back into the eDRMS. Digital signatures are set to change this. Note that this should not be confused with a signature that has been scanned, saved as an image and pasted into a document – nor is it signing an electronic device.

According to BusinessDictionary¹ a digital signature "authenticates and executes a document, identifies the signatory" and is "practically impossible to forge". This means that the document you created in an eDRMS does not have to leave that environment. All actions are completed within the system and a clear audit trail together with strict encryption codes ensures only those authorised to sign can do so. The *Electronic Transitions Act 1999* allows that authorisations can be provided digitally as long as that authorisation can be authenticated². Currently, digital signatures are not in use at DoT – however, this is likely to change in future.

OFFSITE STORAGE

The management of offsite storage and secondary storage has changed. There is an increased awareness of the need for confidentiality and storage security of records both in-house and offsite.

At MRWA during the 1990s, records were stored at file level rather than boxed, in agency-owned buildings offsite. Records staff made a daily trip to collect files. Eventually, records were stored at box level in an approved offsite storage provider under the WA Government's Common Use Agreement (CUA) for government agencies.

Previously, agencies itemised contents of archives boxes by writing on the outside of the box.

In more recent times, there is an increased awareness of the need for confidentiality and storage security of records both in-house and offsite. MRWA has a 'clean box policy'. That is, all boxes sent offsite should only contain the required barcode identifier on the box. Details of the agency or contents of the box are written on the outside. We now have more advanced eDRMS systems whereby this information is input into the system, indexed and easily retrieved, without the necessity for information being written on the box.

A clean box policy avoids and/or minimises the possibility of external people accidentally seeing an interesting topic or it being visible in a van during transit. It also indicates we are serious about managing confidentiality.

IM IN GOVERNMENT AGENCIES

The role of information management (IM) has changed over time within government agencies. People who aren't involved in IM often wrongly perceive the role of records personnel. However, being proactive in explaining our roles can often help with clearing misconceptions – it's our role to manage the information we receive, create, archive, dispose of and disperse.

Having been in a difficult situation where an employee took issue with an IM staff member reading a confidential document containing sensitive information about a legal matter, it brings to light the lack of understanding that some people have about the nature of our work. Trying to explain that reading the document is an integral part of what is required to capture the metadata, index and register it correctly, as well as apply appropriate security and choose the appropriate file and destination, was a difficult task.

There can be a lack of understanding and acceptance that IM staff are bound to the agency by confidentiality. We simply can't do our work properly without familiarising ourselves with the information the document contains.

Some of the documents and files I have dealt with in my 28 years in IM have contained unpleasant information, contentious information, highly sensitive data, horrific and heart wrenching photographs and reports – and this doesn't make for pleasant reading/viewing in the course of duty.

In the 1980s and 1990s, retention and disposal teams, system support teams, training teams, archivists and records management (RM) or IM specialists – especially ones with IM qualifications – were a rarity. Today it is far more common place to walk into an RM area and find qualified practitioners in either or both disciplines. In the early days, job titles were 'records clerk' or 'indexing clerk', while today the more common job title is IM officer.

Job description forms have also changed, with some agencies listing qualifications as an essential requirement, some as a desirable requirement, while some don't require them at all. There is now a different perception of people working in IM with people actively choosing this field as a career. When I started in Records, it was because I asked for an internal transfer to another area, which is how I started my role in a records environment. Since then, I have built my skills and knowledge both formally, informally and through working in different agencies. I have trained more people than I can count and shared as much knowledge and skills as possible. I made it my career not just a job and have enjoyed the ride.

People who aren't involved in IM often wrongly perceive the role of records personnel. However, being proactive in explaining our roles can often help



A BOOK BY ANY OTHER NAME ...

My journey is slightly different (Mimma). Having initially started employment in the Science area as a laboratory technician, I opted for a change in career and commenced my library studies in 1990. I worked for nearly 22 years in school libraries before gaining employment at the DoT as Coordinator Resource Centre – or library as most people still call it. The Resource Centre came under the umbrella of Information Management Services (IMS) which in turn sits in the Corporate Services Directorate. After two years in this role, I was fortunate in securing a position as team leader information management operations within the IMS branch. Basically, I look after the Records team and the Department's day-to-day operations of records management.

It has been a challenging but enjoyable role. While my background is primarily library based, there are a lot of cross-overs with the records environment. A book by any other name is a record after all. It requires classifying, adding appropriate metadata using pre-set standards, allocating subject headings and unique identifiers, shelving the items in correct sequence for ease of retrieval, loaning the item out via the library management system. Sound familiar? The terminology used is slightly different, but the intent is very similar.

Once upon a time libraries and records / information management areas were treated as two distinct areas. However, there is an emerging realisation that there are similar aspects of functionality between the two areas and the divide is becoming less distinct. At DoT this is the current scenario, and the library is seen as an information management asset.

The IMS branch at DoT is currently looking at migrating all our Resource Centre records from a dedicated library management system into our EDRMS. The functions of the Resource Centre that continue to be of value to the DoT will be managed by the IM Ops team but the library as a separate entity will disappear.

From my personal observation there appears to be a growing trend for government libraries to be shut down. Is this a bad thing? The jury is still out – however I do see the need to change how we manage information and having one central repository where employees can search for the information they require does make sense. Libraries from across all sectors are evolving – they are being referred to as resource centres, knowledge centres – much as RM has now become IM to encompass more than just paper records. So maybe it has changed from how it was in the beginning and maybe that is a good thing. It is certainly food for thought.

It is interesting to note that MRWA still maintains its library within the Information Services branch with a full-time librarian to manage all the library functions. Another example of how being part of the same portfolio does not mean that processes are the same.

NEW TECHNOLOGY

The constant development of new technology has resulted in the democratisation of information: that is, access to information is more readily available and to a greater number of people than ever before. Statistics show that at June 2017³ 51% of the world's population had access to the internet – in December 1995 that percentage was just 0.4%. The volume of information that is created, accessed, shared and used is astronomical and this has had an impact on how the daily business of any organisation is managed, not just government

agencies. The evolution of email alone in the late 1990s considerably changed the way we received our business documents both internally and externally. Business decisions were undertaken via email and communication overall changed considerably.

Business classification schemes have also changed to a certain degree. Where once these were based on subject matter many have now moved to classifying by function. So while the activity has changed the basic function of categorisation, that is arranging records into meaningful groups, still remains. Keyword AAA still covers the administration functions of a department, but agencies have developed their own functional component.

Many years ago, the use of statistical data to measure KPIs was commonly used within the Records area. However, this form of measuring KPIs often doesn't work in an IM area. Take for example the processing of archive boxes and trying to put a KPI against this process – boxes are mystery bags! Trying to explain that this is not an adequate or an accurate measure for KPIs is often challenging but anyone who has worked with archive boxes can easily see the pitfalls in attaching KPIs to such a process. Having worked in Retention and Disposal for close to a decade, I have experienced this.

RECORDKEEPING PLANS

In the early days of record keeping in WA, the *Library Board of Western Australia Act 1951-1983* governed the archives and recordkeeping responsibilities of agencies. This changed with the introduction of the *State Records Act 2000*. At the time it was introduced, the Act was the first legislation in Australia where an independent recordkeeping authority had a direct reporting role to Parliament⁴. As part of WA government agencies records frameworks, having a Recordkeeping Plan (RKP) became compulsory under the requirements of the Act.

An RKP provides evidence of the recordkeeping systems and capabilities of the organisation. The RKP must show compliance with six principles which cover:

keeping proper and adequate records; outlining the policies and procedures that support this; language control; preservation; retention and disposal; and compliance. Other Australian states and territories have RKPs and frameworks within which agencies must comply; however, after contacting the recordkeeping authority in each, WA is the only state/territory where an RKP is mandatory.

MOVING FORWARD

We have looked at what our role has been in the past, but what are we evolving into? At DoT we see ourselves as enablers, that is, we enable business units to do more of their own record keeping. The Records team is no longer the sole point of entry for documents. To combat this, employees must be given the capability to undertake some recordkeeping responsibilities – is this the right way? The best way? The most efficient way? Enabling more autonomy to business units can be risky – but there are both advantages and disadvantages of enabling business units in this way. You have people with little RIM skill or knowledge often making decisions on what should and should not be kept, added to the EDRMS, sent offsite or kept on site. There is often a lack of understanding of what metadata should be used for titling. There are other issues as well, such as business units storing on shared drives, network drives and the likes instead of

... the Act was the first legislation in Australia where an independent recordkeeping authority had a direct reporting role to Parliament⁴

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ensuring that the information is in the eDRMS.

However, there are some advantages. No longer does the IMS team have all the necessary knowledge to determine which files documents are best placed. Today, information arrives digitally directly to an employee's personal inbox; and, as such, the IMS team does not always get to see it, let alone even know it exists. Encouraging business units to use the systems themselves and manage their own information gives them more autonomy and enables them to become more responsible recordkeepers. The business unit is best placed to self-manage their own information, have relevant shared folders in the eDRMS, and manage their own holdings. IM staff need to first educate and train people in how to appropriately manage information within the established frameworks, where necessary develop new frameworks, then offer ongoing support.

The concept of enabling users has resulted in changes to the training regime within an agency. There are now 'super users' and training is delivered by formerly unheard of methods, using emerging technologies which are becoming the norm.

Once upon a time, user training consisted simply of teaching a person how to search for a file by number, write a file requisition slip, fill in a file movement slip and explain the in- and out-tray trolley-run clearance system. If you were identified as needing system training, then you were usually sent on a course and given a basic overview of the functions and processes within an eDRMS. Nowadays, training is tailored to business units' specific requirements.

With the advances in technology, training can be delivered via other means besides the traditional classroom method. At MRWA, training can be conducted by Skype. This has been quite successful as new regional staff are trained promptly without having to come into head office. We can also remotely access other employees' computers to assist them one on one with systems and other IM issues that may occur. ❖

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