

# INFORMATION MANAGEMENT

AN ARMA INTERNATIONAL PUBLICATION

NOVEMBER/DECEMBER 2014

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Managing the Risks of Engaging and  
Terminating Cloud Services

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# INFORMATION MANAGEMENT

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# Shattering Stereotypes with IG Skills

**F**ar from fitting into the outdated stereotype of those toiling among musty boxes in subterranean spaces, today's successful records and information management (RIM) professionals are stepping into information governance (IG) roles that more directly contribute to their organizations' ability to meet their strategic goals. If you are aiming to shatter an outdated stereotype in your own career, developing skills across the IG landscape—including in the areas of information technology (IT), legal, risk, and business, among others—is imperative.

For example, if your organization is among the majority of those considering contracting with a cloud services provider (CSP), you must be proactive in ensuring that it has considered not only the benefits, but also the IT, legal, and business risks of doing so.

In this issue's cover article by Brian Boyd, J.D., CIPP/US, the author writes that contracting with a CSP means giving up a measure of control over—but not responsibility for—the information's security, availability, and quality. He goes on to explain various cloud services models, how to determine cloud solution requirements, and what due diligence you must do to ensure a successful relationship from inception through termination.

Forrester Research analyst Cheryl McKinnon also focuses on technology in her report on the results of the just-completed 2014

survey tracking key trends and challenges facing RIM. In combination with other Forrester research, the survey results suggest that IG programs need to be rebooted to focus on what her company is calling the “business technology agenda” that has organizations “investing in new technologies and changing their systems and processes, specifically to attract, retain, and serve their customers.”

This means, McKinnon writes, that RIM pros must anticipate moving to the cloud, prepare for digitation to accelerate, address risks in new sources of ESI, and focus as much on the needs of business stakeholders as on legal stakeholders' needs.

The importance of aligning with corporate objectives and sharpening IT skills in this “big data” age is echoed in the final feature article, written by Bruce Dearstyne, Ph.D. He quotes Tom Davenport's *Big Data at Work* in saying that big data “is revolutionary and holds transformational possibilities for almost every business” and that because the world and the data that describes it are constantly changing, “those organizations that can recognize and react quickly have the upper hand.”

Dearstyne writes that “the growing importance of digitally powered enterprises should open new possibilities for RIM programs,” but to capitalize on these opportunities, program leaders need to develop broader and



deeper leadership skills, embrace new ways of thinking, encourage creativity, and foster innovation.

Finally, in the Generally Accepted Recordkeeping Principles Series® (Principles) article, Julie Gable provides two case studies, including one to help you understand how to apply the Principles to expand your RIM program into “IG territory.”

We trust that these articles provide plenty of practical guidance for helping you ensure that your organization is one of the “successful digital enterprises” that Dearstyne describes, one that combines “fundamental best practices in RIM with leaders and teams that are creative, innovative, and not afraid to ‘fail small’ so they can win big.” Please tell us how else we can help by e-mailing us at [editor@armaintl.org](mailto:editor@armaintl.org).

**Vicki Wiler**  
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## CYBERSECURITY

### Data Breaches Shake Consumer Confidence

Most consumers are reluctant to continue to do business with a company that has suffered a financial data breach, according to a recent global survey by SafeNet of more than 4,500 adult consumers. Almost two-thirds (65%) of the respondents said they would never or were very unlikely to do business again with a company whose customers' financial information had been breached.

The SafeNet Breach Level Index for the second quarter of this year reported a total of 237 breaches between April and June, compromising more than 175 million customer records containing personal and financial information. Only two of the 237 incidents were considered secure breaches where encryption protected the stolen data from being used.

Three of the top five breaches were in the United States, the other two in Europe. Additionally, the United States accounted for 85% of the records compromised worldwide, followed by Germany

with 10%. At the industry level, retail was the biggest loser with more than 145 million records lost or stolen, followed by government, which accounted for 11% of the records lost or stolen.

## CLOUD

### Court on Cloud Computing: Ignorance Is No Excuse

A recent ruling in the case *Brown v. Tellermate Holdings, Ltd.* should serve as an excellent reminder that organizations using cloud computing (and their attorneys) are expected to understand the way cloud computing works, especially during e-discovery.

This became abundantly clear when the plaintiffs requested that Tellermate produce documents from the cloud-based application Salesforce.com. Tellermate objected, stating that it didn't possess or control the data maintained in the cloud database and that the data belonged to Salesforce. Apparently Tellermate and its attorneys failed to check their agreement with Salesforce.com, which clearly stated that Tellermate had access to the data and, in fact, retained ownership of it.

The court not only denied Tellermate's objection, it went on to question whether the data had been properly preserved. It turned out that when an employee separated from the company, Tellermate deactivated or reassigned

access to the database account. That meant the data input by the plaintiffs had remained accessible and could have been changed by the employee who took over the account. Thus the reliability of the information that could be produced could not be guaranteed.

The message should be loud and clear: ownership of and responsibility for preservation of data stored in the cloud is the customer's. This holds true regardless of the software application.

"Technology, like cloud-based computing, can be a valuable resource, but it is important to understand its intricacies in order to prevent misrepresentations to the court," concluded attorney Matthew Barley in a posting on the Butler Snow LLP blog. "As the court in *Tellermate* noted, both the failure to produce and failure to preserve the information in salesforce.com was 'premised on the basic inability to appreciate whose information it was and who controlled it.'"





## MOBILE DEVICES

# NIST Offers Guidelines for Vetting Mobile Apps



The use of mobile devices at work may improve productivity, but it can also challenge the organization's data security and privacy. Third-party mobile applications need to be thoroughly vetted before they are allowed in the workplace. This is true for all sectors, including government. That's why the National Institute of Standards and Technology (NIST) drafted guidelines for vetting third-party apps.

"Agencies need to know what a mobile app really does and to be aware of its potential privacy

and security impact so they can mitigate any potential risks," Tony Karygiannis, a computer scientist in the NIST's Computer Security Division, told *InformationWeek*. "Many apps may access more data than expected and mobile devices have many physical data sensors continuously gathering and sharing information."

For example, individuals could be tracked without their knowledge through a calendar app, a social media app, a Wi-Fi sensor, or other utilities connected to a global positioning system. "Apps

with malware can even make a phone call recording and forward conversations without its owner knowing it," Karygiannis said.

The draft offered the following recommendations:

- Understand the security and privacy risks mobile apps present and have a strategy for mitigating them.
- Provide mobile app security and privacy training for your employees.
- Vet all mobile apps and their updates to ensure they remain suitable throughout their life cycle.
- Establish a process for quickly vetting security-related app updates.
- Advise stakeholders what the mobile app vetting does and doesn't provide in terms of security.
- Have a software analyst review mobile app testing results within the context of the organization's mission, security policies, and risk tolerance.

## E-DISCOVERY

# FRCP Proceeds to U.S. Supreme Court

On September 15 the U.S. Judicial Conference approved the proposed changes to the U.S. Federal Rules of Civil Procedure. The revisions, which next will be considered by the U.S. Supreme Court, include language intended to narrow the scope of pretrial discovery to ensure demands are "proportional" to the needs of a particular case.

Proponents contend the proposed changes will help lower the skyrocketing costs of litigation. Opponents, on the other hand, state the changes would benefit big business at the expense of plaintiffs with legitimate claims, reported *LegalTimes*.

If the Supreme Court approves the changes, they will proceed finally to Congress. Unless Congress opposes the amendments or decides to make adjustments, the changes will take effect December 1, 2015.



## PRIVACY

## EU Accuses Google of Distorting Privacy Rule

The European Union's Justice Commissioner, Martine Reichert, recently chastised Google and other search engines for intentionally undermining the EU high court's recent right-to-be-forgotten (RTBF) privacy rule. Reichert contends that the search engines are purposely distorting the essence of the law by claiming it will allow anyone to get virtually anything deleted from the web if they deem it unfavorable or inconvenient.

This controversial ruling is part of the EU's effort to reform its data protection laws. It allows individuals to be "forgotten" by petitioning search engines such as Google to remove links to web pages containing personal information that is inaccurate, irrelevant, outdated, etc. Only the links need be removed; the actual web pages remain intact. The search engine can reject the



request if it determines the public interest trumps the individual's right to privacy, at which point the applicant can appeal to a national data protection authority.

[Google and others] are "trying to use the recent ruling by the European Court of Justice on the right to be forgotten to undermine our reform," Reichert stated in her recent address to the IFLA World Library and Information Congress. "They have got it wrong. And I will not let them abuse this crucial ruling

to stop us from opening the digital single market for our companies and putting in place stronger protection for our citizens."

Reichert pointed out that the court "explicitly ruled that the right to be forgotten is not an absolute, but that it will always need to be balanced against other fundamental rights, such as the freedom of expression and the freedom of the media." Striking that balance may not always be easy, she acknowledged.

## INFO SECURITY

## Information Security Costs Rising

Look for worldwide spending on information security to reach \$71.1 billion this year, Gartner advised; that's an increase of about 8% over 2013. It's expected to increase another 8% in 2015. Gartner's latest research indicated that data loss prevention is the fastest growing segment.

According to the research analysts, the increasing adoption of mobile, cloud, and social [computing] (often interacting) will drive the use of new security technology and services through 2016.

Gartner Research Director Lawrence Pingree said the bigger trend that emerged in 2013 was the democratization of security threats, driven by the easy availability of malicious software (malware) and infrastructure (via the underground economy) that can be used to launch advanced targeted attacks.

"This has led to increased awareness among organizations that would have traditionally treated security as an IT function and a cost center," he said.

Other trends being forecasted are:

- By 2015, about 10% of IT security will be delivered in the cloud.
- Regulatory pressure in Western Europe and Asia/Pacific will intensify.
- Mobile security will be a higher priority for consumers beginning in 2017.







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## INFO SECURITY

## Healthcare Industry Battles Breaches

There was a 30% increase in the number of breaches on the Identity Theft Resource Center's 2013 breach list released earlier this year compared to 2012. And the highest percentage occurred in the healthcare industry: 44% compared to 34% for the business sector, which has topped the list since 2005.

One reason for the dramatic increase is the tougher reporting requirements of the final rule of the Health Insurance Portability and Accountability Act (HIPAA) that became effective in 2013. The U.S. Department of Health and Human Services (HHS) recently submitted its annual breach report to Congress for 2012. It showed that theft continues to be the leading cause of breaches of unsecured protected health information; the percentage increased to 52% in

2012 from 49% in 2011.

What happened in 2013? HHS is still compiling the data, but in the meantime, a 2014 benchmarking study of 505 healthcare organizations conducted by Ponemon Institute showed a slight decrease in the number of breaches reported in 2013.

The cost of data breaches to healthcare organizations continues to average about \$2 million over a two-year period. Based on the experiences of the 2014 participants, Ponemon estimates the cost to the healthcare industry could be as much as \$5.6 billion annually.

Employee negligence is the greatest security risk, according to the benchmarking study. Three-quarters of the organizations ranked it their greatest worry, followed by use of public cloud services (41%) and mobile device insecurity (40%). Despite that, 88% of the organizations permit employees and medical staff to use their own mobile devices, such as smartphones and tablets, to connect to the organization's networks.



Participants also expressed their lack of confidence in business associates to protect data against breaches. Interestingly, the HHS report revealed that healthcare providers accounted for the majority of breaches in 2011 and 2012, 63% and 68%, respectively; business associates accounted for 27% and 25%, respectively.

One thing is certain: Healthcare organizations are continuing to struggle to comply with the HIPAA final rule.

## PRIVACY

## Young Americans Protective of Privacy

They may live their lives online and share their most intimate secrets with a broad group of "friends," but younger Americans are actually protective of their privacy, according to a study by the Public Affairs Council (PAC).

The survey asked participants if they would be willing to sacrifice their privacy "to protect national security" or obtain "lower-cost products and services." Surprisingly, the answer to both was generally "no," said PAC's Alan Crawford. Regarding the question of national security, 42% said they would give up "some privacy in order to help protect national security," while 56% would not. Almost three-quarters (72%) said they would not trade their privacy to save money on goods and services.

In both instances, younger Americans were more concerned about preserving their personal privacy. In matters of national security, millennials (born 1981-1996) were the most vocal (61%), followed by Gen X-ers (1965-80) (57%), and then Baby Boomers (1946-64) (55%). Age was less of a factor in the second question: 71% of millennials would opt to preserve their privacy, as would 76% of Gen X-ers and 73% of Baby Boomers.





## Study Highlights Implications of E-Discovery in Asia



In a global marketplace, it should come as no surprise that e-discovery is becoming a global process. E-discovery in Asia tends to be especially challenging for multinational enterprises because of growing data privacy concerns, new regulations, and Chinese state secrecy laws.

“E-discovery is an increasingly global process, whereas the challenges become less about data volume and more about jurisdiction,” said Rod Sutton, senior managing director and regional chairman for FTI Consulting in Hong Kong.

FTI recently released the findings of a study that highlights more than 20 factors encountered in dispute resolution unique to Asia. FTI queried 70 Asia-based law firm and corporate e-discovery professionals about the evolving e-discovery trends in this complex region. Key findings of the study included:

- 67% of respondents cited regulatory investigations as the biggest driver of e-discovery.

- 79% said managing data privacy laws and confidentiality are the biggest challenges.
- 40% think new laws in China will have a large impact on managing electronic data in legal review – particularly the Law of the People’s Republic of China on Guarding State Secrets, which broadly requires documents to be reviewed and cleared of secrecy concerns before leaving China.

### ***Discovery in Hong Kong***

To facilitate the discovery process in Hong Kong, the Hong Kong judiciary recently introduced a “framework for reasonable, proportionate, and economical discovery of electronic documents.”

Hong Kong’s current discovery rules do not distinguish between paper and electronically stored information (ESI). Both parties are expected to disclose all documents within their possession, custody,

or power. They are obligated to disclose not only documents that are directly relevant to the issues, but also documents containing information a party could use to advance his own case or damage his opponent’s case. Hence, the rising costs of litigation.

The purpose of the new framework, in general, is to make the civil procedure more cost-effective, expedient, proportional, and fair. It requires the court to actively manage cases by making use of technology and directing that the trial proceed quickly and efficiently. It bears a clear resemblance to the U.S. Federal Rules of Civil Procedure. Its key take-away points are:

- Discovery issues should be considered as soon as litigation is contemplated.
- Steps must be taken to preserve documents, including ESI, including any scheduled for destruction in accordance with a document retention policy or in the “ordinary course of business”; ESI should be preserved in its native formats.
- The parties and their legal representatives should be technically competent and discuss the use of technology in facilitating the discovery of ESI.
- The parties should agree among themselves how the costs of discovery will be shared.

While these concepts sound familiar, they represent a cultural shift away from the practice of adversarial discovery that has been pervasive in Hong Kong, explained Sidley Austin LLP.

## MOBILE DEVICES

## Get Ready for Wearable Technology in the Office

First it was the personal computer, then the notebook computer, smartphones, and tablets. What's next? It may well be wearable technologies, most notably smart glasses, smart watches, and fitness bands. Deloitte predicts that in 2014, more than 10 million units of wearables will be sold, totaling about \$3 billion in sales. Analysts further estimate that wearables will eventually be able to handle two-thirds of what we currently do on smartphones.

Of course, wearable technology is just emerging, but if it catches on as quickly as smartphones, tablets, and other performance-enhancing technology, it won't be long before we see a new fashion trend in the workplace. Now is a good time to prepare for that eventuality.

Just as personal mobile devices have challenged organizations, so too will wearable data devices (WDDs). Forbes reported this summer that insurance giant USAA had prohibited WDDs in the workplace until it had fully researched the potential advantages and disadvantages of the new technology. Some of the concerns USAA had were:

- Employees inadvertently recording inappropriate audio in the workplace
- Employees capturing sensitive images in the workplace
- Potential safety hazards while driving or walking on company property
- Infringement on employee privacy

Forbes's Jeanne Meister offered the following advice to companies that are forming their policies on wearable devices: Remember what happened when companies tried to ban the use of Facebook

and YouTube on desktops in early social media policies? Employees accessed the sites anyway on their smartphones, which affected their on-the-job productivity. The same could easily happen with wearables.

"Smart employers will put policies in place now to manage the integration of WDDs into the workplace and adjust them as needs dictate," said Mintz Levin attorney Jonathan Cain in a recent privacy and security advisory. "Less prepared employers will be deeply exposed to liability for data breaches, privacy and workplace discrimination complaints, and other disruptions as they try to catch up."

He added that human resources and IT policies should address at least the following concerns:

- **Detection:** WDDs may not be readily detectable, unlike smartphones and tablets. Therefore, "[w]orkplace policies should set out the circumstances under which various categories of devices may be used, and what notice is required to co-workers and customers when they are brought into the workplace."
- **Security:** Most WDDs will have wireless capability, which could challenge the security of corporate data. Policies need to clarify where and under what circumstances that wireless capability may be used.
- **Privacy:** Co-workers' and customers' reasonable privacy expectations may be challenged when employees are allowed to use WDDs to record their interactions. The employee's privacy ex-



pectation for the data collected by the WDDs may also be inconsistent with the employer's views about its right to monitor and record data broadcast within its workspaces.

- **Productivity:** As with smartphones, balancing the use of smartphones to access personal e-mail or web browsing with productivity will likely become even more challenging with WDDs. It may be necessary to modify workplace policies to address the use of company resources and company time with the "pursuit of personal interests using WDDs."
- **Support:** As more WDDs are brought into the workplace, demands on IT to support those devices will increase. "Employers need to consider whether and how they will integrate these new classes of devices into their IT environments."
- **Liability:** "Policies should address the circumstances under which interactions with third parties may be recorded. Employers also should consider how they are going to limit their employees' expectations that data transmitted from a WDD over a company network will remain private."



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## CLOUD

## Microsoft Privacy Case Has Cloud Industry on Edge

**W**ho owns data stored in the cloud? Where are the legal boundaries? These are issues at the core of a Microsoft privacy case. Microsoft has been ordered by a U.S. federal court to turn over a customer's e-mail stored on servers in Ireland in compliance with a U.S. government-issued search warrant. Microsoft is fighting the ruling, contending that the e-mails belong to the customer. As for the search warrant, Microsoft says there is well-established case law that it cannot reach beyond U.S. shores. U.S. District Judge Loretta Preska ruled the location of the e-mail was irrelevant because Microsoft controls it from the United States.

Many see this as the latest hit to the cloud computing industry and, particularly, to U.S. cloud providers still dealing with trust issues because of the National Security Agency surveillance scandal. But that's just one piece – this case could also have far-reaching ramifications for international law. In an interview with *InformationWeek*, Morgan Reed, executive director of the Association for Competitive Technology, pointed out that if the U.S. government can force Microsoft to turn over data in an Irish data center, European governments

could decide they can extract data from U.S. citizens anywhere in the world.

Elad Yoran, CEO of cloud security vendor Vaultive, told *InformationWeek* that businesses should not resist the cloud but should ensure they control their data. He stressed the importance of encrypting data before moving it to the cloud and holding on to the encryption key. Kate Westmoreland, a lawyer and fellow at Stanford Law School, concurred: "It means power is back with the user. There are limitations on being able to compel users to give up those keys."

Preska's verdict wasn't immediately applied because she unexpectedly issued a bench ruling that stayed her decision so Microsoft could appeal.

"Either way this decision unfolds in the end, the important thing is to have some business certainty," Westmoreland said.

## CYBERSECURITY

## FDA Focuses on Cybersecurity, Medical Devices

**O**ctober was National Cybersecurity Awareness month. To celebrate, the Food and Drug Administration (FDA), in collaboration with the National Institutes of Health and Homeland Security, was to host a public workshop and webcast to engage the healthcare and public health sectors in promoting medical device security.

One theme for discussion was identifying cybersecurity gaps and chal-

lenges, especially end-of-life support for legacy devices and interconnectivity of medical devices. The goal was to bring together the stakeholders to identify those challenges and to discuss strategies and best practices, including how to adapt and implement the FDA's guidelines for managing these risks, "Framework for Improving Critical Infrastructure Cybersecurity."

The vulnerabilities of medical



devices continue to increase as more and more devices are connected to the Internet, hospital networks, and other devices. For example, connected devices could be threatened by malware or unauthorized access to configuration settings in medical devices and hospital networks. It's up to manufacturers to remain vigilant in identifying risks associated with their medical devices, and it's up to hospitals and healthcare facilities to evaluate their network security and adequately protect the hospital system, the FDA said. The agency recommends that medical device manufacturers and healthcare facilities work together to address those weaknesses and implement safeguards necessary to protect medical devices from these and other potential security risks.





## PRESERVATION

# Using Technology to Preserve Space Age History



**T**he challenge: preserve national historic landmarks that are falling into decay. One answer: laser scanning.

Funding limitations for major preservation projects have prompted the U.S. Air Force to take a high-tech approach to the challenge. The Air Force has turned to laser technology to document and preserve Cape Canaveral Air Force Station's historic launch structures that launched the United States' first manned spacecraft to orbit the earth in 1962.

The Air Force's 45th Space Wing partnered with the University of South Florida's (USF) Alliance for Integrated Spatial Technologies (AIST) to use a laser scanner "to survey, map, and create virtual-model videos of six of the highest priority historic launch complexes."

"We consider many of these structures to be endangered species, meaning that they are unique and sometimes the last of their

kind, and we are looking at ways to preserve them digitally and holistically, as well as improve chances for effective stabilization and maintenance," said Lori Collins, Ph.D., the co-director of the AIST program.

"Digital documentation will, in this case, not only be used for preservation and archival recording efforts, but for visualization through online, classroom and other applications, promoting education and outreach," she explained. "Already, data from this project has been used in courses at USF on heritage preservation, museum visualizations and field method applications,

and much more is planned in the way of teaching and training using heritage as a theme."

The scanning and field operations are complete and the project is now focusing on modeling, visualization, and other digital products for possible future maintenance and stabilization of the structures. The Air Force said the next phase of the project is scheduled to begin in 2015 and will include terrestrial laser scanning and 3-D spatial technologies to identify, evaluate, and document baseline conditions at the launch complexes so researchers can evaluate condition changes and deterioration.

## INFO SECURITY

# Home Depot Security Breach Fallout Begins

**M**ove over, Target; Home Depot is now in the hot spot. In September, Home Depot finally confirmed a breach of its payment security systems that affected 56 million customers in its U.S. and Canadian stores.

Within a matter of days, the first class action suit was filed in the Northern District of Georgia; Home Depot is based in Atlanta. Attorneys general in three other states have launched investigations.

The lawsuits accuse Home Depot of negligence in failing to secure customers' personal and financial information. While most of the cases were filed on behalf of customers, two credit unions and a bank also have filed suit.

KrebsOnSecurity reported the breach September 2, stating it could extend back to April and affect all of Home Depot's 2,200 U.S. stores, according to Reuters. A variation of the malware that compromised Target's systems last year was used on the Home Depot systems, according to Krebs.

As of September 25, Home Depot had incurred \$62 million in expenses, including legal costs, associated with the breach, reported *The National Law Journal*. But this is just the beginning. Home Depot was due to respond to the court by October 10.

On a side note, Target, which had 40 million customer records breached in December 2013, currently faces about 100 lawsuits. The company has moved to dismiss the litigation brought by financial institutions, contending it has no "special relationship" with them that requires a duty of care.





## DATA PRESERVATION

# Automated Data Preservation on the Rise

Organizations are increasingly seeing the benefits of automating their litigation hold process. According to the 2014 Legal Hold and Data Preservation Benchmark Survey, 44% of organizations have automated their legal hold process, compared to 34% last year, and they have reported higher confidence in their data preservation process should they need to defend it. In fact, 70% of automated users were satisfied to very satisfied with their litigation hold processes, while only 35% of manual users said they were satisfied or very satisfied.

At this rate, software provider Zapproved, which conducted the survey, predicts that the majority of all legal data preservation will be automated by 2015. This is especially relevant given that it has become common practice in commercial litigation for opposing sides to challenge each other's preservation efforts, noted Brad Harris, vice president of legal products for Zapproved. Almost one-third (31%) of the survey respondents had to defend their preservation practices this year, up from 22% last year.

The number of litigation holds issued per month is also on the rise. The "Power Preservers" category identified by the survey – those organizations that issue six or more holds a month – jumped 30% from

last year. Predictably, this group is more likely to be using an automated system given the benefits of streamlined processes and higher return on investment. Still, only 60% of power preservers are automated.

One area that continues to be of concern is employee training. While 64% of the respondents reported they train employees, fewer than half said that employees are "tuned into their obligations."

Harris concluded the report by offering steps organizations could take to improve their processes:

- Audit current preservation processes to measure their effectiveness and whether they meet the threshold of current legal standards.
- Prepare to defend preservation. The goals should include process consistency, maintaining a detailed audit trail, and identifying potential points of failure.
- Emphasize training and a culture of compliance.
- Educate yourself continuously – this is a fast-moving area of the law.

## LEG/REG

# U.S. Companies Charged with Violating Safe Harbor

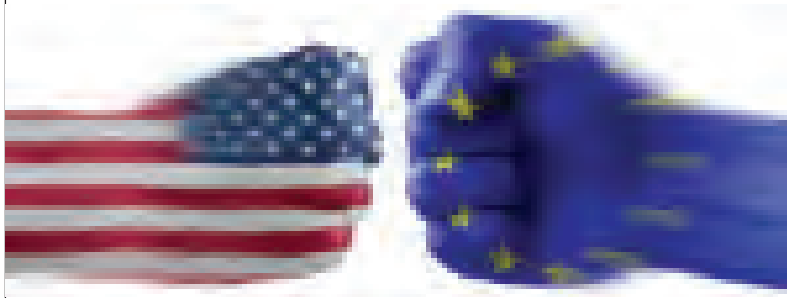
Thirty U.S. companies have been called out by the Center for Digital Democracy (CDD) for allegedly violating the Safe Harbor agreement between the EU and the United States.

CDD recently filed a complaint with the Federal Trade Commission (FTC) asking it to investigate the data brokers and data management firms for collecting, using, and sharing data about European residents in a manner inconsistent with the Safe Harbor framework.

"[The] companies are relying on exceedingly brief, vague, or obtuse descriptions of their data collection practices, even though Safe Harbor requires meaningful transparency and candor," asserted CDD Executive Director Jeff Chester.

Some of the broad concerns CDD cited included 1) failure to provide "accurate and meaningful information" to EU consumers; 2) lack of candor about how the data is collected; 3) failure to provide "meaningful" opt-out mechanisms; and 4) the "myth of 'anonymity,'" considering that companies collect enough details that a user's name is almost irrelevant for marketing.

*Forbes* contributor Emma Woollacott pointed out that the European Parliament voted some time ago to suspend the Safe Harbor but the European Commission has not done so, "preferring instead to hold the threat of suspension over the United States' head."







## E-DISCOVERY

### Notable Trends in E-Discovery

The intent of the Federal Rules of Civil Procedure is to ensure a “just, speedy, and inexpensive determination of every action and proceeding.” That’s a pretty tall order in a time when the amount of electronically stored information (ESI) is exploding. In an effort to meet that challenge, three trends have emerged that in-house counsel cannot afford to ignore, according to Benedict Hur and Matthew Werdegarr, partners in Kecker & Van Nest, in a recent article.

First, the sanctions for e-discovery violations are growing. There are indications that the number

of violations may have leveled off, the authors said, but the courts are also much quicker to impose monetary penalties and issue sanctions for e-discovery misconduct. For example, in 2013 a federal judge levied a \$1 million sanction for e-discovery mismanagement and warned that more could follow.

Second, more courts are using their local rule-making powers to enact new e-discovery model orders and guidelines. These new rules typically “call for phased discovery of ESI, limits on e-mail discovery, limits on the obligation to preserve and collect certain categories of ESI, increased cooperation between litigants on e-discovery issues and enhanced cost-shifting provisions to discourage e-discovery overreaching,” the authors explained.

“Now more than ever, courts are

willing to entertain creative proposals for reigning in e-discovery, provided that they are tailored to the circumstances of the case and transparently describe what will be covered and why,” they wrote.

Counsel needs to do their homework at the outset of a case if they are going to take advantage of the new rules. They need to know where the relevant data resides, how much there is, and how difficult it will be to collect it. Only then can they hope to craft a comprehensive, justifiable e-discovery plan.

The third trend is the proliferation of new tools to assist in finding, collecting, and producing the data required for e-discovery. Predictive coding is one of the hottest e-discovery tools. In short, predictive coding uses computer algorithms to identify relevant documents based on a human review of test documents. Despite the up-front effort required, many believe it has the potential of dramatically decreasing e-discovery costs.

The law governing the use of predictive coding and other emerging tools is still being written. The authors recommend that anyone considering using predictive coding read U.S. Magistrate Judge Andrew Peck’s order in 2012’s *Moore v. Publicis Group*.

## DATA PRESERVATION

### New Technology Said to Preserve Data for 1,000 Years

Hitachi Data Systems Federal (HDS) has introduced a digital preservation platform it says will enable federal agencies to comply with the Presidential Memorandum – Managing Government Records’ requirements to preserve and archive mission-critical data indefinitely.

The new platform allows long-term storage of 50 years using Blu-ray, and eventually up to 1,000 years using M-DISC media, ac-

cording to the HDS announcement of the new solution. “These optical media solutions ensure compatibility as data formats continue to evolve, longevity across generations of technology, and continued retrieval and use.”

The release went on to explain, “In addition to alleviating pain points caused by forced data migrations, enterprise-quality optical discs ensure that agencies can safely preserve data for decades

because of their proven survivability, including resistance to water, dust, electromagnetic events, and storage environments that have high heat and humidity.”



## E-DISCOVERY

## UK Businesses Re-Think Data Protection Strategy

Recent high-profile data breaches such as those involving eBay, Adobe, and Kickstarter, for example, have prompted many UK organizations to re-think their data protection strategies. Trend Micro's EU Data Protection Regulation report found that 68% of UK organizations are reconsidering their strategy.

The greatest threats to their data, reported UK organizations, come from accidental loss by employees (36%) and cyber attacks (29%). Many have responded by training staff to raise their awareness about data security (72%), using encrypted passwords (60%), and implementing technology for remotely wiping lost devices (47%) and for identifying network intruders (32%).

Organizations reported increasing user demand for transparency:

37% have had more requests to know what user data is being kept and where. Surprisingly, though, only 26% have a formal process for notifying customers in case of a breach and, in fact, always notify them. Almost one-third (32%) have no formal policy for notifying customers.

The impending EU General Data Protection Regulation will require all organizations that do

business in EU states to immediately notify customers in the event of a data breach and to notify the applicable regulator in as few as 24 hours.

"The majority of UK organizations don't have this capability, and this is a perfect example of how organizations will need to up-scale their readiness against tough new standards," said Vinod Bange, partner at the international law firm Taylor Wessing.

Bange added that organizations also need to be able to comply with the new right-to-be-forgotten ruling handed down by the European Court of Justice (the highest court in the EU). "[The ruling] established that EU data laws apply in a context that was not previously envisaged, so organizations need to ensure that they have processes in place to address compliance with EU data laws which they may have previously considered as not applicable to them."

"Awareness is growing among companies that the new EU data legislation will have a significant impact on their businesses, but there is still some way to go," said Ferguson. "It's frightening considering how close it is and how little some organizations know." **END**



## E-DISCOVERY

## Cloud Providers Unprepared for New EU Regs

Businesses aren't the only ones not ready for the impending EU General Data Protection Regulation. Cloud services providers are far from prepared.

The first thing to note is that the new regulation will affect any organization based in Europe, operating in Europe, or handling data pertaining to EU residents. Liability for data breaches and violations of the law will be shared between data controllers (organizations that own the data) and data processors (such as cloud providers that store the data) – and the penalties can be severe. Yet only one in 10 cloud service providers is prepared to meet the new requirements, according to a study by security provider Skyhigh Networks.

Some areas of specific concern are as follows:

- 23% of cloud providers maintain the right to share data with another third party, which could make complying with the right-to-be-forgotten requirements difficult.
- Only 1% offer encryption using customer-managed encryption keys.
- Only 3% enforce secure passwords.

Clearly there's a great deal of work to do before the regulations go into effect, which is likely to be in 2015.





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# Cloud Control

Managing the Risks of Engaging  
and Terminating Cloud Services

Brian Y. Boyd, J.D., CIPP/US





**A**ccording to a recent survey of *Harvard Business Review* readers in large and midsize organizations, 70% said their organizations had adopted cloud computing. Of these, 74% said it provides a competitive advantage. This potential for cost savings and increased business efficiencies helps explain why cloud use is expected to continue its rapid growth. But there are associated risks with cloud use, and they can be summed up in a single word: control.

When an organization utilizes a cloud service, it gives up a measure of control over the security, availability, and quality of the data or service it entrusts to the cloud service

savings the motivation for leveraging the cloud, or is it the promise of improved data access and transparency, faster system performance, redundancy, or something else? These questions should guide an organization as it progresses through the request for proposal, due diligence, and contract negotiation processes.

### Gathering Cloud Solution Requirements

The most common business use for the cloud is simple data storage because the cloud offers space that is low cost, easy to access, and almost infinitely scalable. In other cases, an organization may choose the cloud to gain

**Organizations recognize the advantages cloud computing can provide, but the many risks that come with storing data in the cloud must be considered as well. This article spells out the due diligence organizations must do before contracting with a cloud provider, as well as the proper way to manage the end of such a relationship.**

provider (CSP), but it remains responsible for the data. When the relationship with a CSP ends, regaining that control can be challenging. Therefore, before an organization engages with a CSP, it should go through the process of gathering requirements, performing due diligence on the prospective CSP, and contractually protecting its expectations and interests.

### Classifying Cloud Solutions

First, while the phrase “cloud computing” has burst into the lexicon, its meaning remains as nebulous as clouds themselves. *The cloud* has spawned “public,” “private,” and “hybrid” clouds, among others. And from the cloud comes a litany of “as-a-service” offerings, including software as a service (SaaS), platform as a service (PaaS), infrastructure as a service (IaaS), and more.

The catchphrases themselves are unimportant, but the conceptual distinctions are important to any organization moving into the cloud. Options range from a blank slate of hardware infrastructure in the cloud that is dedicated to a single business client (IaaS in a private cloud), to niche cloud-based software that serves a narrow function for anyone who purchases the service (SaaS in a public cloud), and many variations in between. In short, not all clouds are alike, and not all cloud services are alike.

Rarely will an organization have all its technological needs satisfied by a single CSP; usually some IT functions and data will be kept in house. So, an organization first must have a clear understanding of its goals in moving some part of its business to the cloud. For what business process or information will the cloud be used? Is cost

access to the CSP’s powerful data analytic tools, or to run algorithms to define market segments, or to identify emerging product or service demands.

However simple or sophisticated the need might be, the focus should first be on what requirements apply to the data that will be shared with the CSP. This includes data the CSP will store, data the CSP will have access to, and, in some cases, data the CSP will generate itself.

### Determine Privacy, Security Requirements

Many data security and privacy laws and regulations apply to businesses, based not only on their industry, but also on the nature of the data at issue and how that data is acquired. For example, personally identifiable information (PII) in the form of 1) medical, 2) credit, or 3) employee records can each implicate different legal requirements.

Some privacy requirements apply to particular industries, such as the Graham-Leach-Bliley Act (financial), the Health Insurance Portability and Accountability Act (HIPAA), and the Defense Federal Acquisition Regulation Supplement, to name a few.

Other laws, such as Massachusetts’ data security law and the EU Data Protection Directive, apply to virtually any organization maintaining PII on individuals residing within the statute’s jurisdiction.

### Identify Other Obligations

Data also may be subject to contractual obligations or constitute an organization’s own trade secrets, requiring special treatment or protections. Before CSP selection can begin, an organization must determine what legal

# No insurance will completely compensate for the losses associated with a high-profile data breach, not the least of which are reputational.

obligations arise from the data and incorporate those requirements into its due diligence and contracting process.

## Performing Due Diligence

At this point, an organization has gathered the information it needs about its cloud service goals, what information it will share with its chosen CSP, and the security and privacy duties that govern the handling of that data. With that foundation set, the organization must next look into the provider's financial condition, insurance, security, data center locations, disaster recovery plan, reputation, and clientele.

## Assess Financial Conditions

Entering a relationship with a CSP that is not financially sound can have serious consequences. For example, in the pending action *GlaxoSmithKline LLC v. Discovery Works Legal, Inc.*, the pharmaceutical giant alleges that its e-discovery service provider, while "apparently spiraling toward insolvency," threatened to destroy terabytes of sensitive information unless it was paid a ransom of more than \$80,000.

Only a small percentage of CSPs are public companies, which makes it more difficult to access their audited financial statements. If a CSP can prove it has the backing of significant institutional investors, this can provide a measure of assurance.

It is worthwhile to look at whatever financial information a CSP is willing to furnish. However, because CSPs operate in an emerging market, many are start-ups and their financial profiles will likely compare unfavorably to traditional outsourced service providers. This is particularly true for CSPs that provide specialized or patented SaaS and less true for CSPs that offer more generic IaaS or PaaS, of which there are more. Therefore, while the risk of dealing with nascent CSPs is real, it should be assessed with an understanding of the competitive environment they operate in.

## Check Customer Base

Since financial due diligence may not yield a clear picture of a CSP's long-term stability, alternative forms of inquiry are all the more important. One indicator of a cloud provider's staying power is the profile of its existing customers. While there may be some appeal to being a cloud provider's largest and most important customer, generally that is not a position an organization wants to be in.

A CSP that builds its business around a single customer may do everything it can to keep that customer happy, but it may also become desperate if faced with the prospect of losing that customer, as the *Glaxo* example illustrates. If an organization wants to part with its CSP for any reason, it will need the utmost cooperation from its outgoing CSP to facilitate a smooth transition. That cooperation will be difficult to secure if the CSP is about to shut down.

## Verify Insurance Coverage

Insurance is another consideration; it is an essential component of a CSP contract. Cybersecurity insurance is particularly important. Indemnity obligations in the event of a data breach are provisions that are often debated, if not contested, in contract discussions with a CSP.

From the organization's perspective, it is storing its data in the CSP's castle. From the CSP's perspective, the organization holds the keys to the castle. In truth, if the castle is breached and data is lost, it can be difficult to determine whether the CSP or the organization is responsible. While indemnity – which is the CSP's promise to pay for the cost of the organization's possible loss or damage – may be an option, cybersecurity insurance is sometimes an easier solution.

Wherever an organization's data resides, it remains the property of that organization, and any contract should stipulate as much, particularly as it relates to PII and the organization's intellectual property. If a CSP has a data breach involving the client's PII, the client, not the CSP, could be responsible for costly notification requirements; this is the case in 47 U.S. states.

Cybersecurity insurance might cover that expense, but not all cybersecurity insurance is alike. An organization may have its own cybersecurity insurance that covers a data breach, even one involving its third-party CSP, but many cybersecurity policies do not provide this coverage. If a CSP has cybersecurity insurance, it may cover only the losses suffered by the CSP itself. A CSP that has so-called third-party cybersecurity insurance may be able to offer coverage to its clients, and those clients should seek to be identified as an additional insured on such policies.

## Check Security Measures

Another important aspect of cloud vendor due diligence is determining how secure your company's data will be. No insurance will completely compensate for the losses associated with a high-profile data breach, not the least of which are reputational. If a CSP will provide simple cloud-based storage and nothing more, an organization might achieve the greatest level of security by storing the data in encrypted form and retaining the encryption key (without providing it to the CSP). But in many contexts, particularly in many SaaS solutions, encryption of all data in the cloud is not a feasible solution. Then the admonition of "trust, but verify" is apropos.

However an organization chooses to satisfy itself regarding a CSP's security, those rights and obligations must be carefully documented in the contract. Moreover, organizations should ensure that the security verification process is ongoing throughout the term of the contract.

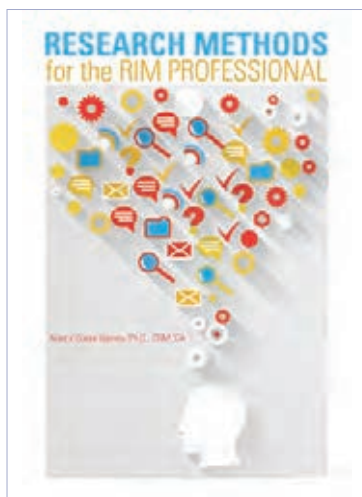
Even where the best security practices are faithfully followed, data breaches can occur. But the impact of a





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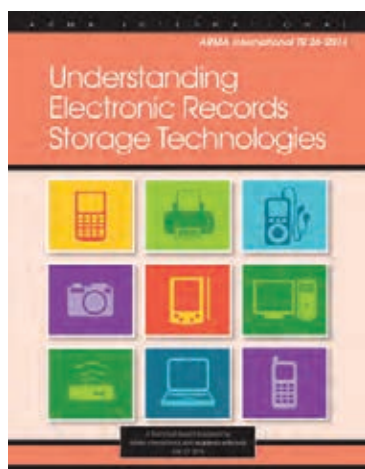


### Research Methods for the RIM Professional

Nancy Dupre Barnes, Ph.D., CRM, CA

In this era of “big data,” records and information management (RIM) professionals that have a basic understanding of the foundational theories buttressing data analysis, such as research methods, have increased value to their organizations. This book serves as an introduction to research methods, using examples that are specifically relevant to archives and RIM professionals, where possible. It will also help IGP candidates improve the knowledge and skills referenced in the DACUM chart domain of “Managing Information Risks and Compliance.”

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### Understanding Electronic Records Storage Technologies

(ARMA International TR 26-2014)

This technical report includes a broad discussion of storage technologies and service offerings for electronic records, including operational issues such as outsourcing considerations and contract-related elements. It includes checklists and information purchasers can use for creating a request for proposal and for evaluating and selecting electronic records storage service providers.

Note: This publication does not address the storage of physical records, which is covered in *Guideline for Evaluating Offsite Records Storage Facilities*.

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## Whatever the organization's requirements are for system performance and availability, they must be documented in the service level agreement.

data breach can range from a public relations challenge to a business-ending catastrophe. The difference can hinge on what measures the affected organization took to ensure the security of its data. An organization that suffers a data breach through a respected, ISO 27001-certified CSP will be treated with more understanding by the public and regulators than one that lost data by contracting with a three-employee start-up that had no strict security practices.

### ***Confirm Location of Stored Data***

A related component of due diligence is learning where a CSP will physically store the data. This is another instance in which the distinctions between a public and a private cloud become important. In a public cloud, the provider typically stores the data of multiple clients on shared physical resources at data centers that are often scattered across the globe. A private cloud implies dedicated physical resources to a specific client, a configuration that should give the client more say over the location and conditions for storage.

The location of a cloud provider's data centers can be important if, for example, an organization handles PII of EU citizens. The EU Data Protection Directive forbids the transfer of such PII outside the EU and a handful of additional jurisdictions without specific legal assurances on how the data will be handled.

An organization could unwittingly run afoul of such rules by selecting a CSP with data centers inside and outside EU-approved jurisdictions. For instance, co-location of data is a standard disaster recovery practice, but this innocuous practice could violate privacy laws if data in the EU is backed up to a location outside the EU.

### ***Check Continuity of Operations Plans***

Data co-location is just one potential component of a CSP's broader disaster recovery program, which also must be the subject of the due diligence process. Here, it is important to distinguish between a CSP that merely backs up data and one that has a tested disaster recovery program. If a CSP's service becomes unavailable due to a catastrophic failure, the fact that the vendor has the data backed up at a secure location will be of little comfort. The client organization needs a live, operative system, not just a static and inaccessible archive of data.

Similar to disaster recovery is a CSP's commitment to a service level agreement (SLA). An SLA sets out the CSP's obligations to keep its service running in the ordinary course of business. Based on the requirements-gathering stage, an organization should know how much downtime

it can tolerate.

If the CSP is simply providing archived data storage, an organization may not need instantaneous 24-hour access to that data. If, on the other hand, the CSP is providing an SaaS solution that will manage high-frequency customer orders, any downtime will jeopardize the organization's revenue.

Availability comes at a price. And this is another area where the distinction between a public and a private cloud impacts the level of control an organization will have over its CSP's service. For example, routine maintenance cannot be scheduled to accommodate one particular cloud service client in a public cloud. In a private cloud, by contrast, a client can work with its cloud provider to mitigate the impact of downtime related to maintenance.

Whatever the organization's requirements are for system performance and availability, they must be documented in the SLA with appropriate remuneration and termination options if the CSP fails to perform to the required standards.

### ***Planning for the End***

Once due diligence is complete and the prospective CSP has agreed to the client's contractual requirements, the next step is to focus on the possibility of the relationship between the CSP and the client ending, amicably or otherwise. Business relationships can end for any number of reasons, but there are particular risks associated with the termination of cloud services that must be addressed in the contract.

First, like a traditional software license, SaaS may infringe on a third party's copyright, patent, or other intellectual property rights. Organizations should generally expect that CSPs will defend and indemnify them if they are drawn into a lawsuit over such infringement. However, CSPs will often place limits on their indemnity obligations, and if the CSP's service is found to infringe, the client may be forced to stop using it.

### ***Establish Data Withdrawal Protocol***

If the relationship between an organization and its CSP ends, the client's chief concern is to get its data in a usable form. Over the life of the relationship, the CSP has likely accumulated a great deal of data on the organization's behalf. In many instances the data may be incorporated into a database or proprietary CSP software in a manner that makes it unusable in a flat file. Imagine a complex database of customer information returned to the organization in a heap of plain text, or imagine data from geolocation tracking software returned to the client



in a string of longitudes, latitudes, dates, and times. The format in which an organization will want to receive data will depend on the cloud service at issue. XML and JSON are flexible file formats in certain circumstances.

Even if the desired protocol and file formats are carefully specified, an organization will almost always need some flexibility from the CSP in transitioning the existing cloud service to the client itself or to a new CSP. Contracts must carefully set out the CSP's obligations during this transition period and must be binding regardless of the circumstances for ending the relationship.

### ***Spell Out Transition Costs***

Of course, a CSP will expect to be paid for such "transition services," and it should be paid as an incentive to see the process through. Costs arising from a termination or transition of services should be carefully noted in the contract. And when the separation is complete, the client should have contractual assurances that its data has truly and irrevocably been deleted by the terminated CSP.

### ***Consider Source Code Agreement***

Sometimes, however, a CSP may be unwilling or unable to cooperate in an orderly termination of its services. In these cases, a source code escrow agreement might offer assistance because it allows the organization, at least

theoretically, to recreate the CSP's service without the CSP. It also offers leverage because a CSP that is resistant to cooperating in transitioning its services may reconsider when faced with the possibility that its proprietary source code could otherwise be turned over to the client.

Still, source code escrow arrangements are rife with pitfalls in practical application, so an organization should not place much stock in the assurances they can provide. Finally, an organization should make certain that its agreement with a CSP and any escrow agreement protects it in case of the CSP's bankruptcy.

### ***Make up, Don't Break up***

Perhaps the only thing more difficult than selecting a CSP is breaking up with one. Pulling the plug is not a viable option. An organization should always assume that terminating a CSP will be more difficult, costly, and time consuming than it expects. Generally, both the client and its CSP are better off mending fences than parting ways. But if the relationship must end, the due diligence that was performed at the outset and the proper contractual protections will minimize the pain and help facilitate an effective transition. **END**

*Brian Y. Boyd, J.D., CIPP/US, can be contacted at bboyd@carmodylaw.com. See his bio on page 47.*



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# Research Says: Focus on **Business Technology**





# Agenda to Ensure IG Success

The Forrester Research and ARMA International records management survey, Q3 2014, reveals some bright spots for records and information management (RIM). But, the new “business technology agenda” of investing in tools to attract and serve customers and ensure operational excellence is driving the need for information governance programs to align their focus with these corporate priorities to get the funding and executive sponsorship they need to succeed.

**Cheryl McKinnon**

**2014** marks the sixth year that ARMA International and Forrester Research have surveyed records and information management (RIM) decision-makers in an effort to track the key trends and challenges facing the profession. More than 600 respondents from around the world shared their perspectives in the survey that was conducted during the month of August 2014. A quick summary of the participant demographic data reveals that:

- North America dominated the survey, with U.S. participants at 74% and Canada at 19%.
- Government topped the list of vertical industries at 34%.
- Large enterprises – over \$1 billion in revenue – were represented by 20% of respondents (topped only by 35% who chose

not to answer).

- 19% of RIM programs report into a corporate services department, with 18% into legal, 15% into IT, 10% into lines of business, 7% into compliance, and 26% into “Other.”

When viewed through the lens of other Forrester research, these survey results provide several key takeaways for RIM professionals, including some distinct calls to action.

## **Reboot IG to Meet Corporate Objectives**

Forrester Research has been tracking the shift into what is called the “business technology” (BT) agenda of enterprises increasingly investing in new technologies and changing their systems and processes, specifically to attract, retain, and serve their customers.

Organizations are increasing in-

vestments in tools for front-line employees and the customers they engage. As reported in Forrester’s July 2014 “Top Technologies for Your Business Technology Agenda,” business priorities for 2014-15 are clear: grow revenue; improve customer experiences, as well as reduce costs; differentiate in the market; and, of course, improve compliance with regulations.

Business units that support these priorities – sales, customer service, finance, marketing, and research and development – will be the top beneficiaries of new software investment. RIM professionals must recognize these larger corporate objectives and align new information governance (IG) program efforts to meet them.

In discussions with customers as well as key IG vendors, Forrester frequently hears that business cases for IG tied solely to storage cost reduction or risk mitigation are harder and harder to fund. The “defensible disposition” message does not always resonate with senior executives who have been tasked to do other things like grow markets, expand globally, renew contracts, or launch a new mobile strategy.

Successful, sustainable IG programs must align to those corporate objectives in order to gain sponsorship and budget. Organizations that have yet to establish an IG program can start down this path now; 31% of the Forrester Research-ARMA joint survey respondents report that they have “no formal governance structure” for their RIM program.

## Address Risks in New Sources of ESI

As organizations move to this BT agenda and increase investment in tools to improve overall customer experience and grow revenue, RIM professionals must do a better job of keeping pace. Year over year, new sources of business communication that produce potential records are among the most neglected when it

a risk that this unmanaged collaborative content will become a target for future e-discovery orders or investigations. Second, there is a risk that RIM programs are not in step with how business users are engaging with prospects, partners, or clients. Expect this gap and its associated risks to grow as more and more customer data is collected by marketers, sales teams, and field service teams.

56% still proclaim “no plans” for cloud RIM in the foreseeable future.

## Anticipate Moving to the Cloud

Fear of the cloud continues to be driven by potential privacy or security concerns. Named by 27% of respondents, this is, however, down substantially from 2013, when 58% selected it as a concern.

Fifteen percent admitted they do not know why their organization is inhibited from considering cloud for RIM, and 13% described themselves as “not familiar enough” with SaaS approaches or products.

Only 11% named “policies, regulations or laws prevent using this approach” as an objection to using the cloud for RIM. This is also a shift in thinking from 2013, when this latter objection was named by 25%, the second most popular choice after privacy or security concerns.

## Forrester’s Point of View

Failure to explore cloud-based technologies to manage records or retention policies may keep RIM programs from catching up to the bigger BT agenda. As lines of business work with their IT teams to shift the focus to growth-oriented goals, expect to see more adoption of simpler, cloud-based, mobile-friendly applications to be adopted by the enterprise. RIM professionals must keep pace.

## Prepare for Digitization Acceleration

Not surprisingly, 81% of survey respondents expect the volume of electronic *non-records* to increase as we look into 2015. A mere 5% expect this volume to decrease. The volume of electronic *records* is expected to increase by 90% of survey respondents, with only 1% expecting a decrease.

The volume of paper, however, is expected by most respondents to decrease. For physical records managed by third-party storage providers, 36% expect the volume to decrease. Only 16% expect outsourced volumes to

## Failure to explore cloud-based technologies to manage records or retention policies may keep RIM programs from catching up to the bigger BT agenda.

comes to applying retention policies.

Enterprise social or collaboration sites (including technologies such as Yammer, Chatter, or Jive) are among the content types with the lowest levels of interest for implementing technology for retention. Thirty-three percent of survey respondents are “not interested” in applying retention policies to these sources. A further 14% have interest, but they don’t have firm plans to look at retention for collaboration sites.

Similarly, 29% have no plans to apply retention to cloud-based file-sharing platforms (such as Box); 22% have no plans for instant messaging; and 21% have no plans for external social media (such as Facebook, LinkedIn, and Twitter).

Overwhelmed RIM professionals are still working to bring retention policies to the sources of electronic content that have been around for years. Document management or enterprise content management (ECM) systems top the list of sources for which they are “in the process of implementing” retention; this was followed by e-mail systems.

## Forrester’s Point of View

The persistent neglect of new sources of potential business records sets up two new risks. First, there is

## Expect BT Spending to Increase

Satisfaction levels with current RIM products are generally good: 40% of survey respondents describe themselves as “somewhat satisfied” with their systems, with 17% “very satisfied.”

Optimism for ongoing rollout persists, with 59% planning to expand or roll out new systems into 2015, a figure that has been consistent year-over-year. However, with new “systems of engagement” like social platforms largely being left out of retention policies, RIM professionals should take an opportunity to visit their vendors’ roadmaps and ensure consistent policies can be applied across all key sources of business records – on-premises as well as cloud-based.

A majority of survey respondents (52%) expects that overall RIM spending for products and services will grow into 2015. Forty-four percent expect increased budget to upgrade their existing on-premises RIM technologies, while 36% expect to invest in new on-premises tools.

Only 21% expect to see an increase in spending for software-as-a-service (SaaS) or hosted RIM tools. Currently, 19% of RIM professionals use SaaS or cloud solutions for records management. While this is a significant increase from the 10% noted in 2013,





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increase, with 29% expecting it to stay the same.

Paper records managed onsite are expected to decline, according to 44% of survey respondents. Twenty-five percent expect their onsite paper levels to increase, with 29% anticipating the status quo.

Outsourcing costs to manage physical records in 2015 are expected to decrease, according to 24% of survey respondents, though 17% expect this to rise, and nearly half (49%) expect it to remain the same.

Confidence in long-term preservation is more optimistic in 2014. Paper has long been viewed as the safest form for items with a retention period beyond a decade. This may be starting to change as digital preservation heats up.

Survey findings reveal that 27% of respondents are “very confident” about rapidly and cost-effectively

retrieving electronic records in 15 years, up from 19% in 2013, while 40% are “somewhat confident,” which is comparable to the 41% from 2013. Support for archival file formats – specifically PDF/A – is important to 31% of RIM decision-makers when making technology purchasing decisions.

## Forrester’s Point of View

The move to turn business content and transactions into data that can be used for better decision making will continue to rise in importance. Paper records must be kept not only to meet legal and regulatory requirements, but also to ensure continuity of corporate memory. However, the cost to retroactively digitize historical artifacts is high.

According to Forrester Research’s July 2014 “Global Enterprise Content Management and Archiving Online

Survey,” enterprises get the highest return on investment from enterprise content management platforms when they’re used to automate processes and eliminate paper. RIM professionals must work with line-of-business leaders to identify opportunities to digitize forms and workflows, applying capture and retention policies to the electronic items.

## Balance Legal, Business Stakeholder Needs

With the BT emphasis on growth, customer experience, and service, RIM programs and IG strategies that focus too narrowly on legal and risk may not have the agility and flexibility to address the rapidly changing business environment.

As reported in Forrester’s June 2014 “Extend Compliance and Risk Management to What Really Matters for Your Business,” reputational

damage and customer loss are more likely to cause a company to fail than fines or sanctions. Modern approaches to IG provide guardrails for safe innovation and content generation, not stoplights that impede responsiveness to market needs.

### ***Narrow Focus Skews IG Efforts***

With respondents primarily (79%) from the United States, survey par-

are actively involved with their organization's e-discovery process.

### ***Forrester's Point of View***

The focus on e-discovery in the RIM profession feels disproportionate if just over half of its practitioners take an active role in discovery activities. There is no dispute that e-discovery is a resource-intensive, risk-laden corporate function that

## **RIM programs ... must look at solving the information stumbling blocks that hold back their organizations' progress in meeting customer-focused objectives.**

ticipants name general counsel or the senior-most legal decision-maker as a key executive sponsor for a RIM program, at 21%. This is slightly ahead of the CIO or most senior IT role (at 20%) and executive committee (17%) and the CEO (at 13%).

This is an interesting contrast to data from the UK-based Information and Records Management Society. The same question posed to a predominantly UK respondent base showed that the CIO was most often a backer of a RIM program, followed by an executive committee, a line-of-business manager, and legal.

Even though legal has a much stronger hold on RIM programs in the United States, RIM professionals should ensure that this does not skew the governance mission too narrowly.

### ***E-Discovery Drives Vendor Selection***

E-discovery remains an important consideration when RIM professionals assess vendor capabilities. When looking at solution providers, 65% of respondents deem it important to support collection, review, or other processes as part of e-discovery. This is relatively consistent with the 68% who deemed these capabilities important in the 2013 survey. Just over half (55%) of RIM professionals, however,

must be executed consistently and transparently. Technology innovations originating with e-discovery vendors have produced tremendous gains in areas such as machine learning, technology-assisted review, and tagging, as well as content analytics for very large volume environments.

RIM programs, however, also must look at solving the information stumbling blocks that hold back their organizations' progress in meeting customer-focused objectives. RIM professionals must stake out their place in the BT agenda.

### ***Expect the Same – and Some New – Challenges***

The issues that hinder success have remained relatively constant year over year. However, in 2014 we did find that the cost of RIM solutions has become a concern. Of the 226 respondents who chose "solution is too expensive" as a problem, 48% listed it as "very challenging."

Other top challenges, in line with 2013 findings, include stakeholder alignment, coordination of efforts, and inconsistent user filing, as well as skills development. Privacy was named as a concern by 301 respondents, but a very low number (15%) actually deemed privacy "very challenging."

### ***Coordination Is Lacking***

Coordination of stakeholders and initiatives continues to plague programs. Of the 260 respondents who named "IT, legal, compliance and business stakeholder alignment" as a challenge, 46% deemed it "very challenging." And, of the 236 who named "synchronization of eDiscovery, records management and archiving efforts," 43% deemed this "very challenging."

### ***User Skills Are Lacking***

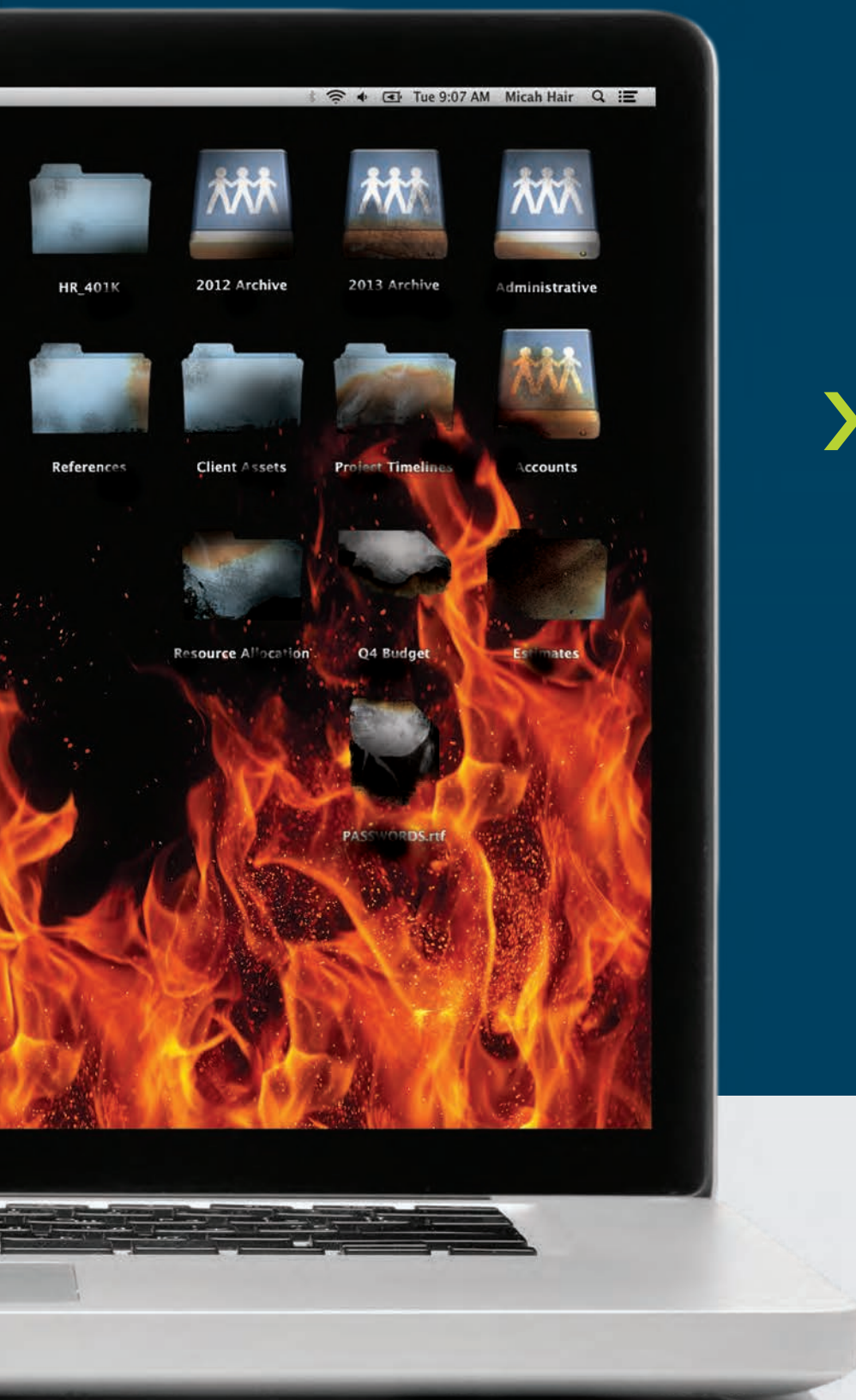
Skills development and user proficiency are persistent barriers to success. Complexity of many RIM technologies and low emphasis on product usability by most vendors will make this a difficult challenge to overcome if the status quo reigns. Of the 253 respondents who named "inconsistent classification by end users" a concern, 42% identified it as "very challenging."

Staffing and development of in-house expertise was named as challenging by 269 respondents – the second highest option – but just 33% described it as "very challenging." Continuing education activities are essential to ongoing RIM skills development.

The top resources that records management professionals turn to in order to keep up with trends and recommended practices include: online sources, such as webinars, podcasts, or mailing lists (26%); traditional publications such as books, journals, or manuals (23%); in-person conferences hosted by professional associations, such as ARMA (22%); and professional certifications such as IGP, CRM, or PMP (13%). Vendor events and university/college courses were named by 11% and 4% of respondents, respectively.

### ***Forrester's Point of View***

As RIM evolves to find a fit in the broader BT agenda, simpler, more automated approaches to content capture, categorization, and classi-



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fication must be explored. Business users will continue to reject complex, multi-step, desktop-dependent content and records management systems. Forward-looking RIM teams must look at simpler, mobile, and web-friendly tools with a high degree of behind-the-scenes policy application to break past the adoption barrier.

Continuing education is essential for professional development and program success. However, RIM professionals who want to drive their IG agenda into the future must proactively leave the echo chamber. Learn what technologies and projects are being adopted across your sales, marketing, and customer service teams and understand how content and potential business records are being generated. Focus as much – if not more – on proactively capturing new records rather than just cleaning up yesterday's mess.

### **Make the Shift to BT to Ensure Success**

The 2014 Forrester Research-ARMA International Online Survey results show distinct bright spots. Fear of the cloud is dissipating, confidence in long-term preservation has grown, and paper volumes are on the decline. But there remains much work to be done.

RIM professionals cannot take the risk of being left out of their enterprises' shift from the traditional IT agenda to the BT agenda. Corporate priorities will differ from business to business, across vertical industries and geographies. More technology decisions are being driven by the need to attract and serve customers, as well as to ensure employee and operational excellence. Focus RIM resources on helping to move these business objectives forward by providing the guidelines and guardrails to facilitate safe, secure, sustainable success. **END**

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# Building Dynamic RIM Programs in Digital Enterprises

Possessing traditional recordkeeping knowledge and skills is important for any records and information management (RIM) professional, but the digital revolution is also requiring them to be more creative, innovative, and nimble. In this article, the author describes the need for such agility and offers suggestions to RIM leaders for fostering innovation and empowering employees.

**Bruce W. Dearstyne, Ph.D.**



**R**ecords and information management (RIM) programs find themselves at the center of an information revolution that is unsettling and seems unending. There is a pattern of continued increase in the volume and variety of digital information being created and delivered through a growing array of channels and devices, particularly mobile devices. Enterprises are making more use of digital information for connecting and collaborating, including via social media.

## Recognizing the Impact of Big Data

These large volumes and variety of information have resulted in “big data” and the analytics tools used to extract and distill useful information from it being in vogue these days.

The concept of big data “is revolutionary and holds transformational possibilities for almost every business,” writes Tom Davenport in *Big Data at Work*. It is particularly important for “customer-facing products and services” but also coming into vogue in government, education, and other settings. “The basic tenet is that the world – and the data that describes it – are in a constant state of change and flux,” he writes, “and those organizations that can recognize and react quickly have the upper hand.”

Ginni Rometty, the CEO of IBM, says data has become the basis for competitive advantage. In her 2014 CIO Leadership Exchange presentation “The New CIO Leadership Agenda, she writes “Exponentially increasing in volume, variety, and velocity, data is ... fueling vast economic growth and societal progress. It promises to be for the 21st century what steam power was for the 18th, electricity for the 19th, and hydrocarbons for the 20th.”

According to “Strategic Principles for Competing in the Digital Age,” from management firm McKinsey’s May 2014 issue of *McKinsey Quarterly*, “Staggering amounts of infor-

mation are accessible as never before – from proprietary big data to new public sources of open data. Analytical and processing capabilities have made similar leaps with algorithms scattering intelligence across digital networks, themselves often lodged in the cloud. Smart mobile devices make that information and computing power accessible to users around the world.”

Indeed, most analysts agree that companies that pursue analytics and digital initiatives tend to outdistance their competitors in terms of effective decision making, market expansion, and financial performance. Companies that make intensive, creative use of digital information and data are beginning to call themselves “digital enterprises.” (See sidebar “The Digital Enterprise.”)

The growing importance of digitally powered enterprises should open new possibilities for RIM programs. To capitalize on this high-stakes development, though, RIM programs need to re-examine their capacities and strategies.

## Developing Skills for the Digital Revolution

The digital phenomenon and its attendant changes suggest the need to develop a broad set of knowledge and skills to guide our information programs forward. Exhibiting professional expertise in RIM will continue to be essential, but not sufficient, to ensure success. Information professionals need a broader and deeper array of skills in leadership and program development.

### Transformational Skills

Professional development initiatives for chief information officers (CIOs) who emphasize leadership and program transformational skills rather than technical information skills constitute one useful model, not only for CIOs but also for information program leaders.

## The Digital Enterprise

Leaders in business are very interested in “digital enterprises” – organizations that make intensive use of data on customers, products, and services to achieve a competitive advantage. Here are recent reports that may be of interest because of their implications for RIM:

- Bain & Company, *Big Data: The Organizational Challenge*. 2013.  
[www.bain.com/offices/italy/en\\_us/Images/BAIN\\_BRIEF\\_Big\\_Data\\_The\\_organizational\\_challenge.pdf](http://www.bain.com/offices/italy/en_us/Images/BAIN_BRIEF_Big_Data_The_organizational_challenge.pdf)
- Gartner, *Taming the Digital Dragon: The 2014 CIO Agenda*.  
[www.gartner.com/imagesrv/cio/pdf/cio\\_agenda\\_insights2014.pdf](http://www.gartner.com/imagesrv/cio/pdf/cio_agenda_insights2014.pdf)
- EY (formerly Ernst & Young) *The DNA of the CIO*, 2014.  
[www.ey.com/GL/en/Services/Advisory/The-DNA-of-the-CIO](http://www.ey.com/GL/en/Services/Advisory/The-DNA-of-the-CIO)
- IBM Institute for Business Value, *A New Era Begins: Redesigning the IT Organization for a Period of Exponential Change*. 2013.  
[www-935.ibm.com/services/multimedia/A\\_new\\_era\\_begins\\_Avril\\_2013.pdf](http://www-935.ibm.com/services/multimedia/A_new_era_begins_Avril_2013.pdf)
- A.T.Kearney, *Beyond Big: The Analytically Powered Organization*. 2014.  
[www.atkearney.com/paper/-/asset\\_publisher/dVxv4Hz2h8bS/content/beyond-big-the-analytically-powered-organization/10192](http://www.atkearney.com/paper/-/asset_publisher/dVxv4Hz2h8bS/content/beyond-big-the-analytically-powered-organization/10192)
- McKinsey, *The Digital Tipping Point: McKinsey Global Survey Results*. 2014.  
[www.mckinsey.com/insights/business\\_technology/the\\_digital\\_tipping\\_point\\_mckinsey\\_global\\_survey\\_results](http://www.mckinsey.com/insights/business_technology/the_digital_tipping_point_mckinsey_global_survey_results)
- World Economic Forum, *The Global Information Technology Report 2014*.  
[www.weforum.org/reports/global-information-technology-report-2014](http://www.weforum.org/reports/global-information-technology-report-2014)

The fall 2014 CIO Institute at the Haas School of Business, University of California at Berkeley, for instance, featured such presentations as “CIO as Strategist”; “Transformational Leadership: The CIO’s New Role”; “Innovation: Strategy and Tactics”; and “Power, Influence and Communication.”

EY (formerly Ernst & Young), in its report “The DNA of the CIO,” notes that CIOs “will need to pay less attention to the underlying technologies they love while focusing more on developing their abilities as leaders, managers, and influencers” and demonstrate how they add value to the company. The report explains that key attributes for the CIO role will include:

- Leadership skills
- Communication and influencing skills

- Analytical approach and organizational skills
- Project and change management skills
- Technological skills and know-how on IT trends
- Knowledge on design and execution of business strategy
- Financial management skills
- Deeper insight into the industry or key geographical markets for your business

Preparing future RIM professionals is also essential. Of course, a thorough understanding of the fundamentals and principles of RIM is necessary, but the professionals of tomorrow need more than that to succeed in the turbulent environment they will be entering.

For example, the nation’s leading information schools, often called “I schools,” are placing increasing



emphasis in three areas of instruction: 1) leadership – developing a vision, inspiring staff and stakeholders to buy into it, and transforming programs to keep them resilient; 2) communication – skill at explaining the program’s services and fully comprehending what its customers desire and need; and 3) implementation – practica and internships that introduce students to how programs are actually administered, as well as practical, effective approaches to carrying out their work.

In this vein, Syracuse University’s master of science in information management is designed to prepare professionals who are adept at:

- Increasing the productivity and creativity of knowledge workers, managers, and executives who work with information resources
- Evaluating, planning, and deploying the effective use of information and communications technologies within organizations

- Developing corporate and government policies to maximize the benefits resulting from the widespread use of these technologies
- Improving the strategic use and management of information resources in business, government, and non-profit organizations

“Leadership” is a theme that runs through progressive educational programs for both seasoned information program executives and emerging professionals. Barbara A. Trautlein, in *Change Intelligence*, describes several leadership styles for contemporary enterprises. Blending three styles – what Trautlein calls the *champion*, the *visionary*, and the *executor* – would be particularly appropriate for RIM program leaders.

*Champions*, according to Trautlein, excel at rallying people around major change goals; they are seen as charismatic and enlightening.

*Visionaries* are change-oriented, big-picture leaders who are eager to

move on to new initiatives.

Trautlein’s *executors* are leaders who emphasize thoughtful analysis and planning, but expect rapid, efficient execution of those plans.

### New Ways of Thinking

RIM programs need to maintain their principles and standards but also must change with the times. Recent studies in innovation suggest that enterprise program leaders need to consider reframing their views of the future from *predictive* (asking “what will happen?”) to *prospective* (asking “what *can* or *should* happen?” and “what should I do about it?”).

Table 1, from *Thinking in New Boxes* by Luc de Brabandere and Alan Ivy, compares the two styles of thought.

### Creativity

Building on that approach, RIM programs should consider developing or strengthening two capacities. The first is *creativity*, essentially deriving new ideas, concepts, or approaches. This requires:

	Predictive Thinking	Prospective Thinking
<b>Mindset</b>	Forecasting, “We expect...”	Preparing, “But what if...”
<b>Goal</b>	Reduce or even discard uncertainty, fight ambiguity	Live with uncertainty, embrace ambiguity, plan for set of contingencies
<b>Level of uncertainty</b>	Average	High
<b>Method</b>	Extrapolating from present and past	Open, imaginative
<b>Approach</b>	Categorical, assumes continuity	Global, systemic, anticipates disruptive events
<b>Information inputs</b>	Quantitative, objective, known	Qualitative (whether quantifiable or not), subjective, known or unknown
<b>Relationships</b>	Static, stable structures	Dynamic, evolving structures
<b>Technique</b>	Established quantitative models (economics, mathematics, data)	Developing scenarios using qualitative approaches (often building on megatrends)
<b>Evaluation methods</b>	Numbers	Criteria
<b>Attitude toward the future</b>	Positive or reactive (the future will be)	Proactive and creative (we create or shape the future)
<b>Way of thinking</b>	Generally deduction	Greater use of induction

Table 1: “Two Styles of Thinking.” Source: *Thinking in New Boxes: A New Paradigm for Business Creativity*

*Hiring people with varying backgrounds to create a diverse workforce and encourage curiosity, learning, and development.*

*Encouraging staff members to be professionally active in organizations such as ARMA International, keep up with the literature, attend conferences, and follow innovative practices and leading-edge programs.*

## Read More About Creativity and Innovation

A number of recent books, some cited in the article, may be of interest to RIM leaders:

- Catmull, Ed. *Creativity Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration*. New York: Random House, 2014.
- Davenport, Thomas H. *Big Data at Work: Dispelling the Myths, Uncovering the Opportunities*. Boston: Harvard University Press, 2014.
- de Brabandere, Luc and Alan Ivy. *Thinking in New Boxes: A New Paradigm for Business Creativity*. New York: Random House, 2013.
- Hill, Linda A., et al. *Collective Genius: The Art and Practice of Leading Innovation*. Boston: Harvard University Press, 2014.
- Kelley, Tom and David Kelley. *Creative Confidence: Unleashing the Creative Potential Within Us All*. New York: Crown Business, 2013.
- Schmidt, Eric and Jared Cohen. *The New Digital Age: Reshaping the Future of People, Nations and Businesses*. New York: Knopf, 2013.
- Trautlein, Barbara A. *Change Intelligence: Using the Power of CQ to Lead Change That Sticks*. Austin: Greenleaf Book Group Press, 2013.

*Establishing in employee work plans the expectation that new ideas are part of the job.*

*Facilitating discussions in staff meetings and other venues where individuals offer new ideas that are discussed in a collegial, spirited, and positive way to make them sharper and stronger.*

*Engaging customers systematically to probe their changing needs and expectations, and at the same time providing information about the RIM program's capacities and limitations.*

*Monitoring RIM and other models of creativity and innovation to identify new concepts that hold promise for potential application in your program.*

*Instituting a systematic process for weighing new approaches that identifies those with the most promise.*

## Innovation

The second capacity is *innovation*, which implies putting the best creative ideas to work. Successful innovation requires a nimble, opportunistic approach with a quick exploration of needs and the development of effective, though not necessarily perfect, solutions. Too much assessment is likely to bottle up or sidetrack creative ideas.

Launching a *good* idea in a timely fashion is almost always better than delaying the launch of a *near-perfect* one that takes so long in development that its opportunity for results has passed. An approach should be deemed "good enough" if, after discussion and analysis, it seems feasible, likely to add value, and well suited to a problem, challenge, or opportunity.

The general idea is to try something to see if it works. One strategy is to conduct fast, small-scale, iterative projects to test the application of new ideas and to learn in the process. The solutions don't have to be perfect; you can adapt and adjust as you go along.

Leaders can encourage creativity and foster innovation, but what really counts is what the team does.

Staff members need to take a concept from proposal to implementation. Ed Catmull, drawing on his experiences in Pixar animation and Disney animation, notes in *Creativity Inc.* that it's most important to assemble a team that interacts well:

Getting the team right is the necessary precursor to getting the ideas right. It is easy to say you want talented people, and you do, but the way those people interact with one another is the real key. Even the smartest people can form an ineffective team if they are mismatched. That means it is better to focus on how the team is performing, not on the talents of the individuals within it. A good team is made up of people who complement each other.

Catmull asserts that if you give a brilliant idea to a mediocre team, the team is likely to fail with it. But, if you give a mediocre idea to a great team, the team will find a way to make it work.

Sometimes, of course, things don't work out as expected. Catmull believes that for greatness to emerge, "there must be phases of not-so-greatness" as people experiment and gain confidence.

Catmull's book offers these additional suggestions to help foster creativity and innovation:

*When looking to hire new people, give their potential to grow more weight than their current skill level.*

*Encourage, welcome, expect, and reward ideas from unexpected sources.* Inspiration can come from anywhere. As a manager, you may need to coax ideas out of staff members, particularly people who are modest or reticent by nature.

*Keep reminding people that "failure isn't a necessary evil." In fact, it isn't evil at all. It is a necessary consequence of doing something new.*

The people ultimately responsi-

ble for implementing a plan must be empowered to make decisions when things go wrong, even before getting approval. Finding and fixing problems is everybody's job.

### Putting Strategies to Work for RIM Programs

There are many ways to implement the strategies we've discussed:

*Align RIM principles with digital enterprise priorities.* The RIM program's strategic plan should include goals that clearly dovetail with enterprise goals of identifying and using data for competitive advantage, new product development, customer expansion, and so on.

*Be sure CIOs and executives really understand key RIM concepts,* such as the Generally Accepted Record-keeping Principles® and information governance. These and other concepts and standards, which define our professional practices, fit well with the recognition of the importance of information, but they need to be understood by the key stakeholders and integrated with the broader information management strategies. Once they understand such concepts as custodial responsibility for information, legal admissibility, discovery, and devel-

oping approved retention/disposition schedules, these key stakeholders will appreciate their importance.

*Find new ways to have in-depth dialogs with customers.* Many discussions with customers focus on reviewing the status quo – for example, how well existing training is going or how well the schedules are being implemented. Conducting deeper discussions with customers might turn up ways to better explain the RIM program or open new paths for expanded services, such as providing advice for managing unstructured data or for managing information created on mobile devices and embodied in social media.

*Find new ways to encourage staff creativity.* Sometimes staff members have terrific ideas for revised or new approaches but have difficulty articulating them or lack the confidence to do so. There are easy ways to address this. For one, include an objective in the individual's work plan that the employee will suggest improved or new approaches where appropriate. Additionally, provide informal coaching that fosters creativity and innovation. In staff meetings discuss such concepts as "big data" and "digital enterprises" and their implications

for the RIM program and profession. Finally, support participation in professional associations.

*Identify opportunities for small, iterative projects.* The methodology summarized in this article is relatively easy to apply. It may seem unfamiliar or even a bit risky to programs that are accustomed to cautious management, gradual change, and implementing large projects based on detailed planning. But trying small-scale, low-risk initiatives to address particular issues or to test the waters can yield heartening results and build confidence in the methodology.

### Meeting the Challenge

The digital revolution is here and is here to stay. It's up to the organizations to rise to the many challenges and to seize the many opportunities that big data and analytics present. Successful digital enterprises will be those that combine the fundamental best practices in RIM with leaders and teams that are creative, innovative, and not afraid to "fail small" so they can win big. **END**

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# PRINCIPLES FOR UPDATING YOUR INFORMATION PROGRAM

Julie Gable, CRM, CDIA, FAI

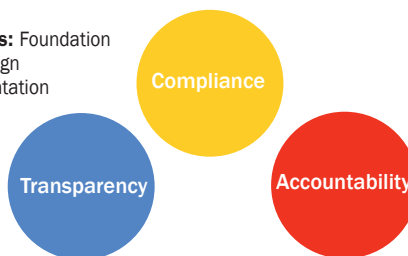


Revising a records management program can be as straightforward as editing a few retention schedules or as complex as changing the organization's information management culture. Some revision projects, especially those whose goal is to extend the records program into information governance (IG) territory, will feel more like a total revamp than a simple revision. In cases where records are to be produced and maintained electronically, program revision may entail a review of business processes as well as of the systems' capabilities.

Program revision may be stipulated by company policy; for example, it may require a routine review of retention schedules every 18 months to ensure that retention rules are up to date. Program revision may also be the result of external issues, such as new regulations, or it may be a response to internal changes, such as new reporting structures or management changes.

## Generally Accepted Recordkeeping Principles®: Program and Records-related

**Program-related Principles:** Foundation standards for program design development and documentation



**Records-related Principles:** Elemental standards for records creation, use, handling, maintenance, and disposition



Figure 1: Records- and Program-Related Principles

Regardless of the reason for program revision, the Generally Accepted Recordkeeping Principles® (Principles) and the Information Governance Maturity Model (IGMM) are useful resources for approaching this work.

The Principles identify how work on fundamental elements affects the overall fabric of the program and, conversely, how high-level program demands influence what must be done at the records level.

**Table 1: Program-related Principles**

<b>Compliance</b>	The culmination of the information governance program that proves the organization's activities are conducted lawfully and in accordance with all applicable legal, regulatory, and ethical requirements.
<b>Accountability</b>	An oversight structure which, by definition, includes the means for approval of prescribed program elements, such as policies, procedures, training, and audit.
<b>Transparency</b>	The documented evolution of policies, procedures, and practices that allows all interested parties to understand the organization's business processes and records practices.

**Table 2: Records-related Principles**

<b>Integrity</b>	The authenticity and reliability of records and the systems that produce them.
<b>Protection</b>	Access security for confidential, privileged, and private records, as well as the ability to reconstruct records after a disaster.
<b>Availability</b>	The ability to find records needed for business, legal, or compliance purposes.
<b>Retention</b>	What records exist and how long they are kept based on operational, legal, fiscal, and historical requirements.
<b>Disposition</b>	What happens at the end of the records' life cycle and how it should occur, with the understanding that life may be prolonged if there are tax, legal, or regulatory holds.

## Conceptualizing the Principles

Doing program revision tasks can sometimes feel like going in circles, but revisions in one aspect of a records program often have benefits for other aspects. This is because, although they are presented as separate and distinct concepts, the Principles are inter-related.

### Program-related Principles

Figure 1, "Program- and Records-related Principles," shows the Principles as two groups. At the top, the Principles of Compliance, Accountability, and Transparency can be thought of as all-encompassing because they establish standards for the development, documentation, and context of the entire program. Like the primary colors of red, blue, and yellow, their essence does not change. They influence program success or failure because they give shape to the whole program.

For a summary of these Principles, see Table 1, "Program-related Principles."

### Records-related Principles

In the lower half of Figure 1 are the

Principles that relate to the records themselves: Integrity, Protection, Availability, Retention, and Disposition. These are the elements that must be considered for every record type. They can be adjusted for greater or lesser intensity depending on what is needed for a specific circumstance. They give specific directions for the records governed by the program and are summarized in Table 2, "Records-related Principles."

Two case studies illustrate how the Principles can guide information professionals through little program tweaks or major overhauls.

### Case Study: Teagan Foods' Program Revamp

Teagan Foods produces several lines of canned and frozen foods for the U.S. and international markets. It operates processing plants in several states, using domestic crops as well as raw materials imported from Canada, Mexico, and Argentina.

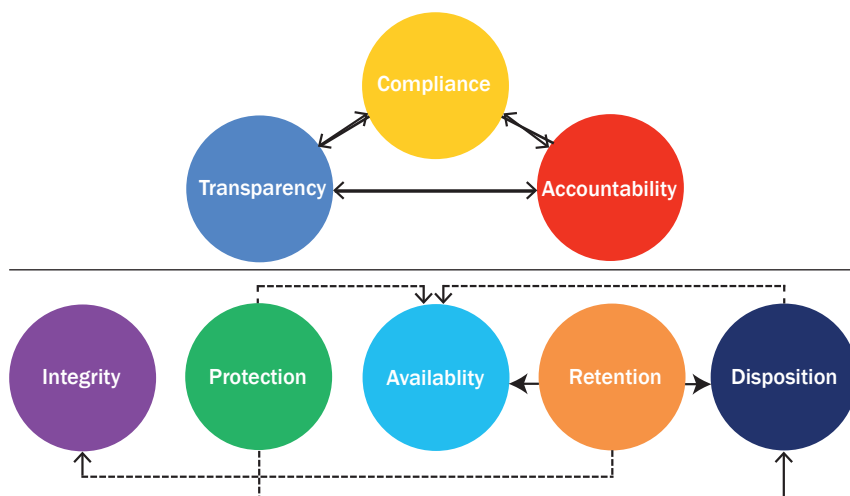
The company comes under scrutiny from the U.S. Department of Agriculture, and as a publicly traded corporation it must comply with SEC

regulations, plus all federal, state, and local tax codes. As a manufacturer, the company must also comply with environmental laws, labor laws, and health and safety requirements.

### Describing the Current Program

Teagan has a records program that includes policies, retention schedules, and procedures, but it is more than 20 years old and was developed around paper records. Many processes – from ordering materials to monitoring processing operations – have become electronic, but these are not reflected in the existing retention schedules. Records policy requires that retention schedules be reviewed every 18 months, but this is done by simply mailing a copy of an existing schedule to a function manager. With staffing changes, it is often hard to find the right person to review the schedule. Also, because records training is not regularly given, most managers who receive a retention schedule for review don't really know what it is or what they're supposed to do with it. The records staff members perceive their role as mostly managing the relation-

## How the Generally Accepted Recordkeeping Principles® Relate to Each Other



**Figure 2: How the Principles Relate to Each Other**

ship with an offsite storage provider to keep costs under control.

Teagan has made some changes in executive management, and the records function, which has reported through administration, will now become part of the law department. The corporate counsel is looking for specific recommendations on how to revise the existing program so it is policy-driven, includes electronic records, and ensures that all records needed for operations, compliance, and litigation are identified and managed in a systematic way. She is concerned with how the company looks to outsiders and believes that company policies should be readily available and easily explained to any interested third party – whether it is a regulator, business partner, or litigator.

### **Revamping Teagan's Program**

Corporate counsel's immediate goals are high level and all encompassing. There needs to be a revision in why the records program exists and how it operates. Cost savings are less important than being able to demonstrate that Teagan understands its legal and regulatory responsibilities and takes them seriously.

As shown in the top half of Figure 2, "How the Principles Relate to Each Other," Accountability, Compliance, and Transparency are program-related Principles that affect each other, as well as the shape of the program.

On learning about the Principles, corporate counsel decides to use them to put a structure in place that will provide authority over the program as well as ensure that resources are available to evaluate compliance needs, formulate appropriate responses, and document the resulting processes. She takes the following steps.

**Establish Accountability.** Beginning with Accountability, the corporate counsel determines there will need to be a collaborative, multi-tiered approach to revamping the program. At the highest level will be an IG oversight committee composed of senior executives from tax, legal, HR, IT, and finance to evaluate risk and interpret regulations as the program progresses. The records oversight committee will have approval authority for the entire program. This group of executives is proof that Teagan takes its responsibilities seriously.

On the second tier will be the IG development committee composed of

designated managers from the business areas who function as subject matter experts and are able to provide knowledge of requirements and business processes as work progresses.

**Ensure Compliance.** To determine Teagan's state of compliance, the corporate counsel confers with the business managers on the development committee to assemble a master list of applicable regulations. Using the IGMM as a guide, she determines that Teagan is at a level 2 for the Principle of Compliance.

By conferring with the oversight committee regarding critical vs. non-critical risks, she determines that Teagan's priorities to strengthen compliance must include a peer relationship between records and IT staff, a business code of conduct, and a stronger, more integrated legal hold process. It is through the development committee that Teagan will show that it understands its legal and regulatory responsibilities.

Having established accountability through the IG oversight team, and with a clearer idea of compliance priorities from the development team, the last – but certainly not the least – tier is put in place as the IG implementation team.

**Form IG Implementation Team.** This group includes the records manager, IT manager, and other experts who, in concert with the development committee, will draft revisions to current policies, procedures, retention schedules, practices, training, and audit standards governing records-related issues.

By interfacing with the development committee, the implementation team will determine how, and at what level of maturity, the Principles of Integrity, Protection, Availability, Retention, and Disposition must be incorporated into the fabric of the company's operations. It is through the ongoing work of the IG implementation team that the Principle of Transparency will be achieved.



## The records manager at SSLC understands the inter-relationships of these Principles and begins by reviewing the business processes associated with the new loan system to see what changes might be needed to records descriptions.

### Case Study: wSSLC's Retention Schedule Revision

State Student Loan Corporation (SSLC) services student loans for the U.S. Department of Education. The organization makes various types of education-related loans, collects payments after graduation or termination of attendance, and follows up on delinquencies.

#### *Describing the Current Program*

Business processes are paper-driven for the initial loan application, and payment is made either electronically through direct funds transfer or through paper payment coupons with checks, which are digitally imaged. All paper and e-mail correspondence with loan holders is also kept.

One complicating factor is that a single student may have multiple loans throughout his or her undergraduate career as well as several loans throughout graduate, law, or medical school. From a business process perspective, it is challenging to know at what point repayment should start, such as when a student graduates or when he or she decides not to return to school.

Though small, SSLC has a well-documented records program. The retention period for loan-related documentation and payment records is 30 years from the date the loan was granted. This retention length was a compromise that was made when the original retention schedules were prepared. There was resistance to an event-driven retention period at

the time because SSLC's home-grown database had no good way to know which loan closed when, as payments were applied manually and not always consistently among all of a student's open loans. At SSLC, a closed loan generates a business process requiring the printing of the entire history of that loan. Many boxes of these voluminous histories occupy the basement.

As is true of many older databases, it is impossible to remove records from the database, even for loans that have been paid in full. The main database has become huge and slow, hampering fast availability of records needed for reference when talking with loan recipients who call with questions or updates.

Storage of image files and correspondence associated with loans is becoming expensive. The basement is reaching capacity for stored boxes. It is becoming clear that 30-year retention is not viable.

#### *Identifying Drivers for the Revision*

SSLC is about to acquire a new system for loan initiation and tracking that will apply payments automatically, identify closed loans easily, and encapsulate and remove to offline storage for retention the records associated with closed loans.

SSLC would like to disposition records that have reached full retention, but to do so must revise its records retention schedules and disposition policies, considering such factors as

the degree of protection required for these records, which contain such personally identifiable information as Social Security and bank account numbers.

#### *Developing the Revision Plan*

SSLC wants to revise the existing retention schedule for loan documentation. As shown in the lower half of Figure 2 on page 40. Retention is the keystone among records-related Principles, touching the Principles of Integrity, Protection, Availability, and Disposition. Work on Retention will ripple through the other Principles like a breeze through wind chimes. SSLC takes these steps.

*Review Business Processes.* The records manager at SSLC understands the inter-relationships of these Principles and begins by reviewing the business processes associated with the new loan system to see what changes might be needed to records descriptions. This exercise yields several important insights for the Principles of Retention, Protection, and Integrity:

- There are new interim reports the system produces and stores in PDF format. These records need to be added to the description of loan documentation on the retention schedules.
- More protected data is gathered in the new system than previously, including a graduate's employer, salary history, and ongoing credit checks. These will need to be protected.
- There is a potential integrity issue in the new system. When records identified as closed are encapsulated and moved to offline storage, the date of the move automatically overrides the date entered for loan satisfaction. This discrepancy needs to be addressed because it affects the reliability of the record itself as well as when the clock starts to tick for retention.

*Determine Retention Requirements.* In talking with loan officers, the records manager finds that regulatory requirements for loan records are the close of the loan plus seven years. However, input from tax staff and legal counsel shows that a retention of 10 years after repayment would better suit the company's availability needs for audit purposes.

Once approved and documented, the new retention period will need to be applied to the boxes of paper stored in the basement, and the boxes that have reached full retention will need to be identified so they can be disposed of properly.

On the plus side, the need to print, box, and store voluminous paper summaries of each closed loan's history to ensure its accessibility for 30 years will no longer be necessary.

*Plan for Legal Holds.* It is agreed that disposition of loan records at full retention will require review and approval by loan officers and the tax and legal departments to ensure that if records are under dispute or needed for legal action, they will not be destroyed. This generates discussion about how to place a legal hold

on records in the system and in offline storage to ensure they are not destroyed.

*Safeguard Personal Information.* Additionally, the disposition of protected information – both electronic and paper – will require safeguards to ensure that it is kept secure throughout any handling or transport until it is finally disposed.

Sighing heavily, the records manager notes the work yet to be done, but also knows that the organization will mature in the Principles of Integrity, Availability, and Protection as the result of its revisions to comply with the Principles of Retention and Disposition.

### Moving from Grass Roots to Executive Sponsorship

For years, RIM programs were constructed from the bottom up, and compliance was the byproduct of grass roots practices. The electronic world, the stricter regulatory climate, and the reality of electronic discovery have made compliance-by-design more necessary.

Mandates for IG now flow from top executives who find them-

selves accountable for their organizations' information processes and practices. The fact is, records programs are meant to be revised because they are not only ongoing guidance for an organization's internal users, but also the basis for how the world judges its business practices.

### Reaping the Benefits of the Principles

The Principles can provide an organized, structured way through the program revision process. The high level, all-encompassing, program-related Principles of Accountability, Compliance, and Transparency can help you build the proper framework to shore up and keep current the IG program. The interactivity of the records-related Principles of Integrity, Availability, Protection, Retention, and Disposition means that improving the program in one of these areas also drives improvements in the others, ensuring that no work is wasted and the outcome is better, stronger governance. **END**

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**Recall** Holdings Limited (ASX: REC), a global leader in information management, announced that it was awarded ISO/IEC 27001:2005 Management System certification by SRI Quality System Registrar on December 19, 2013. Recall is the first information management company to achieve ISO27001 certification for all global operation centers. ISO/IEC 27001:2005 is a process-based certification recognizing organizations that can link business objectives with operating effectiveness. Recall's Global ISO27001 certification demonstrates excellence in Information Security Management System (ISMS) planning, deployment, and provisioning services that support IT infrastructure to protect information and enable the associated secure service delivery processes to Recall employees and customers.



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# The Opportunities and Challenges of E-Government

Robert Bailey, Ph.D., CRM

**M**ark J. Barrenechea and Tom Jenkins, the authors of *e-government or Out of Government*, embrace the idea that throughout various federal, state, and local government agencies, e-government can deliver, with an integrated approach, secure, accurate, and integrated information, both internally and to their citizens.

## Technology's Transformative Power

The authors give more than 50 worldwide examples of government agencies having transformed traditional public sector communications and organizational roles. But, they contend that e-government can be successful only if the government re-evaluates its mission activities and matches them with new automated and streamlined processes, transactions, and interactions. The goal, according to the authors, is to transform relationships based on new collaborations that empower citizens and help governments transparently improve efficiencies and gain citizen trust.

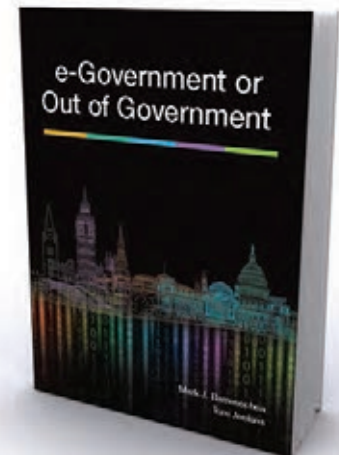
In the foreword, Ian E. Wilson, former librarian and archivist of Canada, makes special mention of the “records to data” aspect of e-governance and the importance of program managers to manage records as effectively as other government assets. However, the book’s focus is on active information. The topic of “records” is mentioned

13 times, but mostly in the examples and seldom as essential to the e-government discussion.

Among the topics given their own chapters are each level of government, from local to international; the need to determine whether government or private enterprise can best deliver public services and the potential for forming public-private partnerships as the most cost-effective and best solution; big data; and cloud computing. Though the last two topics were given full coverage, these chapters cite a lot of information published about big data and cloud computing prior to 2014. Much more is known today, so these chapters already have an historical feel to them.

Two topics the book should have covered more deeply are information security and e-mail management. There is some reference in chapter 3 to secure e-government but not nearly enough discussion about the size of the problems, the threats, and the possible solutions. Despite being only a conveyor of information, e-mail has been at the heart of many recent government agency scandals, proving itself to be a troublesome aspect of e-government.

Because the authors are employed by Open Text, a major enterprise content management (ECM) company, it is surprising that little is said about ECM and its emergence and how it might contribute to e-government solutions.



## e-government or Out of Government

Author: Mark J. Barrenechea and Tom Jenkins

Publisher: Open Text

Publication Date: 2014

Length: 319 pages

Price: Free PDF (with registration)

ISBN: 978-0-9936047-2-0

Source: [www.opentext.com/campaigns/egov-book](http://www.opentext.com/campaigns/egov-book)

## The Future of E-Government

A chapter titled “e-Government and the Future” is more about how the digital revolution is transforming politics and the nature of government than about the development and application of technology. The authors discuss the challenge of achieving the productivity and service quality that new information technology offers while remaining true to the fundamental values of a professional public service. The book suggests the authors believe there is common agreement and documentation about what the public service standard is. More likely, the agreement is as diverse as the number of people being served by a particular level of government.

While its examples have some value for RIM professionals, *e-government or Out of Government* offers minimal use to them on a day-to-day

basis. The target audience seems to be elected officials, government boards, and top-level government administrators.

The book serves as a good introduction to what e-government is to various levels of government and what evolution must take place

before citizens begin to think that government's information services are as responsive as those of private enterprise. It acknowledges that e-government is in a transition stage and very much affected by government leadership and funding. The authors attempt to make the point

that if government does not change the electronic administrative process significantly, government, in effect, will be out of business.

*Robert Bailey, Ph.D., CRM, can be contacted at robertbai@mccarran.com. See his bio on page 47.*

# A Guide to the Strategic Use of Big Data

**Dawn Garcia Ward, J.D.**

**B***ig Data @ Work: Dispelling the Myths, Uncovering the Opportunities* by Thomas H. Davenport aims at and succeeds in setting the record straight regarding: 1) what big data really is; 2) why big data is important across many industries and business functions; and 3) how to capture the value of big data.

Davenport's writing style, his many real-life examples of the use of big data, and the fact that the target audience could come from just about any industry and business function are key to elevating this book from a technology how-to manual to a strategic business and planning guide. The writing is conversational, light-hearted, and, at times, humorous. He makes every attempt to engage a diverse cross-section of readers, from techies to laypersons.

## What Big Data Is

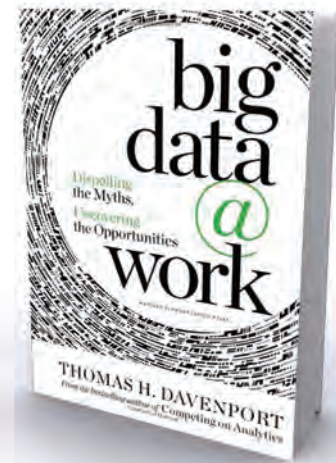
Most readers have heard the term "big data," but many do not know what it really means. It is much more than just a very large amount of data.

According to Davenport, big data is "data that is too big to fit on a single server, too unstructured to fit into a row-and-column database, or too continuously flowing to fit into a static data warehouse." Essentially, this means one thing – a new frontier of data to manage and analyze.

## Why Big Data Is Important

Davenport argues that big data has the potential to bring value to a company in the form of cost reductions, better decision-making, and improvements in products and services. Moreover, he says, "[t]he primary value from big data comes not from the data in its raw form (no matter how big it is), but from the processing and analysis of it and the insights, products, and services that emerge from analytics."

Speaking, even theoretically, about the concept of capitalizing on big data is appealing, but what makes it even more appealing here is that Davenport has gone to great lengths to provide real-life examples of what



## Big Data @ Work: Dispelling the Myths, Uncovering the Opportunities

**Author: Thomas H. Davenport**

**Publisher: Open Text**

**Publication Date: 2014**

**Length: 240 pages**

**Price: \$30**

**ISBN: 978-1-4221-6816-5**

**Source: [www.hbr.org/books](http://www.hbr.org/books)**

companies are doing and plan to do to capitalize on big data.

For instance, GE plans to use big data to improve the efficiency of the 1,500 gas turbines it monitors. Even "a 1 percent improvement in efficiency of monitored turbines from software and network optimization, better dispatching of service, and improved gas/power system harmonization" could result in fuel savings of \$66 billion over the next 15 years, Davenport writes.

### How to Succeed with Big Data

Not only does Davenport explain what big data is and why it is important, he explains where to start and what to do with big data in order to succeed. Chapters 3 through 8, as well as the “Big Data Readiness Assessment Survey” appendix make up the “how to” sections of the book. In these chapters, Davenport provides practical guidelines on the use of big data, including, for example, a model for how to build an organization’s analytical capabilities. In addition to examples, Davenport includes questions throughout the book for readers to ask themselves in order to take the steps to succeed.

### Who Should Be on the Team

Lastly, Davenport argues that the

most important component of successfully using big data is the human factor, i.e., having the right team. This team is composed of, for example, data scientists and business leaders. Although Davenport addresses the need for diverse key players, he leaves out an important field – legal. With the retention of big data, or any data at all, comes the risk of having to produce it in litigation and/or government audit. The team, composed of stakeholders that include legal, will need to understand and weigh the potential risk of handing over this data against the benefits of using it for analysis.

### Informed Readers Benefit Most

It is important to note that Davenport directs most of the book to a specific audience: those readers in

technology or leadership who are familiar with what their company is doing with big data. For readers outside this limited group, the “how to” chapters of the book offer interesting facts and examples, but they are not necessary to them getting a basic understanding of big data.

In fact, Davenport specifically explains in the “Big Data Readiness Assessment Survey” appendix that “whoever replies to the survey questions should be familiar with his or her entire organization’s or unit’s approaches to big data.” This statement holds true for much of the latter part of the book.

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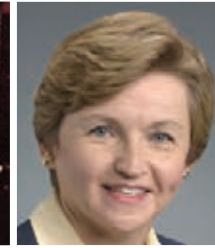
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### Cloud Control: Managing the Risks of Engaging and Terminating Cloud Services

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### Research Says: Focus on Business Technology Agenda to Ensure IG Success

Page 26

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### Building Dynamic RIM Programs in Digital Enterprises

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### A Guide to the Strategic Use of Big Data

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