

Point of View: Records Management and the Cloud

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Records Management and the Cloud

Cloud technology is riding the crest of the hype wave: it seems to feature on virtually every CIO's strategy list for the next few years. There is now more to cloud than innovative technology: large-scale commercial offerings like Amazon Web Services, and government initiatives such as the UK's G-Cloud, are rapidly pushing cloud capabilities into the IT mainstream. Already proven to perform well and to be extremely scalable, these platforms offer a tempting route for many of the organisations that are looking to take advantage of cloud or cloud-like solutions.

One perhaps less obvious candidate for the cloud treatment is records management. This is a task that is becoming more difficult, not less, despite the widespread introduction of electronic document and records management (EDRM) toolsets and the widely available "lite" records management from SharePoint (now as SharePoint 2010), not to mention a vast range of best practice and support.

While the tools are improving, the information deluge is gathering force and threatening to swamp organisations. The familiar problems of email growth, document proliferation, reliable access to information and endless searching are getting worse. Compounding these problems, innovations like cloud-based technologies are blurring the definition of what an organisation is actually responsible for, while social media are revolutionising the way business is conducted. To cap it all, users and executives are no longer ready to put up with disruptive records management solutions in the name of compliance. Today, records management must be invisible, as well as cheap and effective.

Organisations therefore need to make drastic changes to the way they manage information and business records. The advent of cost-effective and rapidly accessible cloud technologies will fundamentally alter users' and executives' attitudes to records management, particularly when these technologies are coupled with new communication pathways such as SMS, instant messaging and Twitter, and social media toolsets like Facebook and Yammer. The pressure for change is increased by a growing awareness of the failure of traditional EDRM solutions to deliver either value or real compliance, despite years of investment.

Real-life applications are already in the cloud

- The New York Times utilises Amazon Web Services to process dozens of terabytes of archival data, using hundreds of server instances, within 36 hours.
- Japan Post has built a retail banking compliance application on the Force.com platform and deployed it to 40,000 users at 24,000 post offices throughout Japan.
- Genentech saves millions of dollars a year using the Google Apps engine for data management and disaster recovery.
- The City of Miami ports vital applications to Microsoft Azure, reducing costs, improving access and providing true resilience.
- Capgemini is adopting Yammer technology for its global internal innovation portal and knowledge dissemination system. Over 60,000 messages were generated in the first month.



The cloud opportunity

Although adopting cloud might seem a momentous decision, in fact it's already happening inside your organisation. Cloud services and social media toolsets are almost certainly being exploited by your users to conduct business activities. That means that records relating to your company are already being created and stored in cloud-based systems, in many cases unbeknownst to your IT and compliance departments. From the corporate CRM repository in Salesforce.com to the CTO department's innovations portal set up using Facebook, important and valuable business records are building up outside your corporate firewall.

Threatening though this unscheduled move to cloud may seem, if properly managed it isn't something that should cause undue concern. The challenge is to use this innovative shift in user behaviour and technical capability to transform moribund records repositories into something which delivers more value and costs less to own.

To achieve that transformation, you'll need to rethink your business's approach to records management. It is worth the effort, because cloud represents a massive opportunity for both your records managers and your organisation as a whole.

Rather than trying to stamp out the unofficial use of social media, you can build on what your users have already done. If they are already using free social media toolsets to generate and manage business records, is there any reason the records can't stay there, or even be expanded? It may be possible to make arrangements with the relevant social media providers to give your records additional protection or resilience.

That way you can turn a tactical choice by your users into a truly innovative solution to records management. But this option is only available if you have, or can get, knowledge of how to make cloud repositories compliant and efficient, together with the capabilities to support your users in doing so.

Benefits of EDRM in the cloud

- At their simplest, cloud-based records management solutions deliver value and savings in two ways. Firstly, they can offer highly efficient storage of records that are rarely accessed but that you are mandated to retain, like old emails and documents. Secondly, they offer massive economies of scale, giving your organisation access to records platforms, functionality and preconfigured compliance-driven solutions which you simply couldn't afford before.
- These two reasons make cloud solutions quite attractive in their own right. The attraction is increased by a natural, synergistic attraction between open source toolsets and cloud providers, which means that extremely flexible solutions can be purchased without the usual cumbersome and often unrealistic software licensing overheads.

Challenges of EDRM in the cloud

In advocating the use of the cloud for records management, we are not claiming it is without problems. The legal aspects are a minefield, and there are particular issues around the protection of personal data and trans-national data flows. Ongoing disagreements between regulators and legal opinion mean that many organisations have either adopted an ostrich-like head-in-the-sand approach, refusing to acknowledge the relevance of cloud, or else have applied draconian policy controls to user behaviour, banning access to all social media providers.

Other difficulties affect even those organisations with a greater tolerance for information risk. One is a lack of clarity around the real cost of ownership of cloud services. Another relates to the serious technical limitations regarding integration of cloud services with on-premise systems and processes. There may also be disconnects between the service levels offered by in-house business processes and those of cloud-based services.

Beyond the mechanical and procedural problems just outlined, there are two even more serious issues. The first issue is that cloud providers constitute an emergent sector. That means that whilst there are obvious market leaders with significant financial clout, some providers will undoubtedly fail, or else be forced by cash flow issues to change their business model, perhaps reducing the functionality they deliver for a given price. In both cases you can save yourself angst by conducting sufficient due diligence beforehand, and in particular by ensuring you have a close understanding of your right to terminate the agreement, migrate to another service or fall back to a pre-cloud contract.

The second issue is even more of a potential blocker. The USA PATRIOT Act of 2001 gives the U.S. government a legal right to any information held anywhere by any U.S.-based company. This right has important implications for all organisations who have a vested interest in keeping critical records secure, who have confidential and high-value intellectual property, or who manage and hold personal data records. It will impact their choice of cloud providers for any service, not just in the field of records management, and has already caused the Canadian government to restrict the use of cloud technologies by all federal departments.

Some key issues in cloud records management

- Many cloud applications lack record functions, so may not meet any records management requirements: here they differ from on-premise applications, which typically provide a degree of records control as part of their functions.
- Some cloud architectures don't have formal technical standards governing how data is stored and manipulated.
- A lack of portability standards may make it hard to remove your business records to meet retention requirements or at contract termination.
- Cloud solutions make compliance with European data protection legislation complex and time-consuming. Data export controls and privacy are both dependent on physical location of data, whereas cloud is inherently flexible about where data is stored.
- Legislation from other countries can have a disproportionate impact on your organisation.
- Vendors' terms of service may not satisfy your organisational needs relating to basic due diligence.
- Technical issues like data encryption and the security of data at rest and in flight are not yet fully solved.



Balancing control against innovation

Internally, organisations have to balance their need to control records management behaviours against the opportunities for increased flexibility and freedom of action presented by cloud and social media. Provided you undertake a thorough evaluation of the risks, and put in place appropriate mitigation and policy controls, this balance can be assured and maintained. You do not need either to expose your organisation to risk or to curtail innovation.

Cloud providers in this space are not just selling technology or services; they are also trust providers. When you are choosing a cloud-based records management solution, the quality of the due diligence you undertake around the provider is critical. Before even embarking on due diligence, however, it is important to evaluate how realistic it can be and how much influence your organisation really has to change contractual elements if required. Your conclusions must be factored into your risk analysis.

To achieve the right balance between control and innovation, you should also aim to develop a proper awareness of user behaviours. Users adapt their records-related behaviour in a remarkably rapid, iterative and flexible way, taking advantage of new tools, emerging techniques and tactical requirements to generate new records patterns on the fly; compliance with organisational standards is often very much a last-minute consideration. In contrast with these innovative user behaviours, records managers tend to view records management as an activity to be undertaken after the event, at the end of the business process; the systems that they design usually reflect that view.

The outcome that is of maximum value to your organisation is one where users are free to innovate, yet records managers and compliance teams have sufficient control to meet your organisational needs. Finding this balance is tricky and the answer will depend on your specific circumstances. Some of the factors to address are shown in the figure alongside.



Our customised approach to implementation

Capgemini’s approach to records management within the cloud is that of the true agnostic. There are no technical magic bullets available, and you cannot just go out and buy a “one-size-fits-all” solution. Your organisation’s needs, compliance requirements and risk profile will determine which combination of business change, policy control and technology solution will work for you.

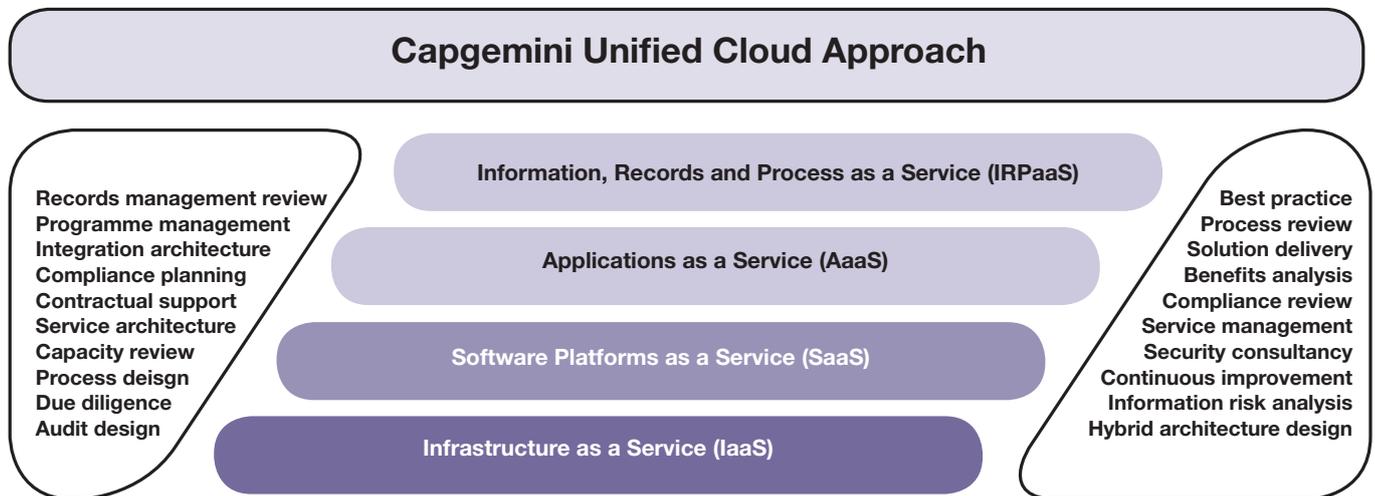
Capgemini’s cloud and information management practices evaluate both open source and primary industry vendors for each engagement. Our end-to-end EDRM approach encompasses both commercial off-the-shelf technologies and tailor-made solutions.

Capgemini’s own, best of breed, cloud-based eBusiness offering, Immediate, has the capability to create and manage records within the cloud, and offers a range of solutions for various scenarios, illustrated below.

Choosing Capgemini as your EDRM implementation partner gives your organisation direct access to a wealth of insight, techniques, tools and knowledge that can be re-used and applied quickly to new situations. The Capgemini EDRM toolkit has been developed on the basis of experience from dozens of other projects from around the world, utilising both on-premise and in-cloud technologies.

Part of this toolkit is a blueprint for the deployment of EDRM solutions, which we call our Collaborative EDRM Approach. This approach easily blends with partner service models and best-practice project management methods to enable rapid construction of a complete end-to-end programme.

Cloud technologies fit well into our established EDRM approach. The main difference is that for cloud EDRM we place much more emphasis on the non-technical aspects, in order to address the special risks associated with those elements and the additional complexity of integrating off-premise elements into your business processes. Working with your existing providers of legal, compliance and liability advice, we deliver the right solution, for the right budget in the right timescales.





Conclusion

The cloud is going to play a part in your future records management strategy, whether you like it or not. In all probability your records are already starting to be both created and managed there, and whilst there are risks involved, there are also great opportunities. It's vital that you address these opportunities before user pressure and executive expectation overtake you.

When evaluating records management solutions in the cloud, it is important to remember that the cloud is not an all-or-nothing model. Some of your records will always stay within your firewall, and most EDRM models of the future will be hybrid solutions combining cloud solutions with on-premise ones.

There are still issues to be resolved regarding cloud include encryption, security of data (both at rest and in-movement), and multi-tenancy but the answers are becoming clearer as more best practices and technical precedents are established. Real-world performance and service levels are becoming more reliable, and projections of them are getting more realistic, as early adoption problems are fixed and innovative pseudo-cloud platforms - so-called "private clouds" or sector-specific clouds like the G-Cloud - enter the market.

Social media toolsets can present problems to both records managers and compliance teams, but the records risks can be managed with appropriate policy and management controls. In this way, organisations can avoid blanket bans on cloud use, and can build on and benefit from innovative records management behaviours.

Personally, I can't help seeing a certain irony in the move to put records in the cloud. After all these years of effort to hold your records in a cabinet or static EDRM system, it's becoming clear that putting them up in the sky can actually leave you better off in terms of quality, security, accessibility and compliance. This step requires a real mind shift, but, all things being equal, it's simply the right thing to do.



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Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™.

The Group relies on its global delivery model called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients.

Present in more than 30 countries, Capgemini reported 2009 global revenues of EUR 8.4 billion and employs 95,000 people worldwide.

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