



Information governance – beyond the buzz

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Abstract

Purpose – This paper aims to discuss the still immature concept of information governance (IG) from a records and information management (RIM) perspective and attempts to identify some critical aspects, essential elements and challenges, drawing on lessons learned from corporate experience in a global setup.

Design/methodology/approach – After a critical consideration of the notion “information governance” the paper reports some issues which turned out to be major barriers to success during IG implementation within a given organisation.

Findings – Practical experience highlights the importance of carefully scoping IG frameworks in larger organisations; in particular, balancing the representation of all relevant stakeholders (especially lines of business) and targeting investment in initiatives that foster an information management culture. Equally critical to success is corporate communication which truly values information as a corporate asset and highlights the importance of information lifecycle management rather than technology under the motto “putting the ‘I’ into IT”.

Research limitations/implications – This paper draws on experience from a single case study to discuss some of the cultural factors that influence the design and implementation of IG in general. However, more empirical research is needed in order to broaden the understanding of the impact of IG programmes in real-world organisations.

Practical implications – When implementing IG programmes in global organisations it should not be limited to an IT perspective alone. The biggest challenge is the fact that no department or discipline alone can achieve the desired results. Success is only possible in an orchestrated scenario with clear value propositions for specific business functions.

Originality/value – Based on a small selection of professional literature on the IG approach, the paper presents findings about issues and pitfalls when setting up and implementing an IG programme. It is hoped that it will inspire more exploratory research of this kind from members of the records management community to encourage them to raise the need for IG in their own organisations.

Keywords Corporate governance, Governance, Information management, Records management, Information governance, Programme management

Paper type Viewpoint



1. Introduction

The concept of information governance (IG) has rapidly gained popularity. Broadly, practitioners in the field of enterprise information management (EIM) seem to embrace the value of IG but only few are really doing anything about it. There is a gap between IG aspirations and corresponding implementation in the real world[1]. IG is puzzling and fascinating a broader audience than just the records and information management (RIM) community. Today there is no AIIM (Association of Information and Image Management) event, no eDiscovery seminar or no enterprise 2.0 conference that does not espouse the mantra of IG.

What are the reasons for this trend and what is really behind this hype or is it even a fad? IG seems to become a trendsetting container for capturing almost everything and nothing in the world of information management. The RIM community tries to capitalise this term in order to get a seat at the table of senior executives and to get out of the dusty image of records administration in a paper environment. IT discovered the term to strengthen the strategic aspects of IT risk and compliance and to treat IT related disciplines under a holistic view but they mostly confuse IT Governance with Information Governance. This paper tries to shed some light on whether IG is just the newest buzzword or if it is actually becoming a new paradigm that will change the face of RIM. First we ask why we need IG, where it came from and second we outline some IG models and concepts; finally we will discuss how they meet the expectations of the RIM community.

2. Why information governance?

During the last few years mainly US-based professional associations, interest groups and experts from the RIM and IT communities came up with two questions:

- (1) Is the concept of a record and records management as a discipline still fit for purpose?[2].
- (2) Shouldn't we reconsider all the requirements under the classic view of information lifecycle management in a more holistic, cross-siloed way in conjunction with all the dependencies from related disciplines in the larger field of Enterprise Information Management (EIM)?

With regards to the first question, there are indeed a lot of signals within the RIM community that it no longer makes sense to approach information lifecycle management only within a narrow focus on records retention and disposition. I do not believe either that in the future we will ask if any kind of relevant information will be qualified and declared as a "record" or not, particularly when on average 7-9 per cent of enterprise content is managed as "official" or scheduled records (Datskovsky, 2012). Instead we should ask: how long do we need all relevant information, why do we need it, how and how much do we use it, and what is permitted while we keep or preserve it. We immediately involve many stakeholders within the organisation to contribute and each contributor benefits from the answers of the others.

Some experts recommend replacing the dusty term "Records Management" by the more open term "Information Lifecycle Management" (ILM)[3] or "Information Lifecycle Governance" (ILG or ILMG)[4]. Looking beyond semantics the question still remains – how to qualify and appraise "relevant information" as it has become impossible to keep everything within an enterprise. Does records declaration still matter[5] or should we adopt the legal concepts around "ESI" (Electronically Stored Information) and assume it must all be managed, record or not?

I suggest that to correctly apply the notion of recorded information according to ISO-15489, we must forget the blurring terms of document, record, context and content and agree on information management as the overarching and generally accepted notion. The basic principles of records management remain valid but are extended, as introduced and outlined in ARMA International's Generally Accepted Recordkeeping Principles®, officially renamed as "The Principles" (ARMA, www.arma.org/r2/generally-accepted-br-recordkeeping-principles) which is explained further below. I

will define information governance simply as principled decisions about information and information management; records management then just becomes one decision domain and discipline under the umbrella of information governance (IG).

As for the second question, according to the current mainstream discussion from consultancy companies such as Gartner and academia (e.g. Kooper *et al.* (2011) it would appear that the notion of IG is already established despite the relative immaturity of corresponding concepts and theories coupled with practical experience being poor. For the time being organisations seem to develop their own understanding of IG according to their internal needs, priorities, ethics and politics – some organisations even treat IG as a synonym of data governance. However one frequent observation is the fact that, in practice, many organisations do not really distinguish between IT governance and information governance; Kooper *et al.* (2011, p. 196) for example, comment on the inadequacy of IT governance to manage the lifecycle. Why is it so difficult to distinguish a pipe from the water which flows in it? Gartner (2009, p. 3) provides a clear message in this respect:

The overall objectives of good governance are to improve the speed and effectiveness of decisions and processes (efficiency), to make maximum use of the information in terms of value creation, and to reduce the costs and risks to the business or organisation. Information governance is a subset of corporate governance. In other words, information governance should not be thought of as part of “IT governance.” Why? Because such a view reinforces the notion that information is the responsibility of IT. It isn’t. [...] Information governance is NOT the province of IT, or at least not the province of IT alone.

Gartner’s view of “good governance” is of course a particular one, focused on highlighting the broad strategic scope of IG, rather than the operational IT scope for IG. Another shortcoming of such general concepts is the fact that those are mostly designed in a very positivistic way, understanding the organisation in an almost ideal-typical way and trying to adopt IG by an “organisation as a machine” approach ignoring most of the implementation problems which are completely based on behaviour including corporate culture and politics. The final section will focus on these critical points which somehow totally mismatch with scholarly aspirations of information governance. However most of the IG requirements are not new just as the building blocks of IG are not really new either. The next section explains why.

3. Old wine in new pipes. Is information governance a new paradigm?

I have introduced the argument that the main principles and building blocks of IG are not new. The term itself was introduced by Donaldson and Walker (2004) as a framework to support the work at the National Health Society in the USA. Correctly understood, information management always had the aspiration to plan and implement all activities/projects of IM related disciplines in an integrated way. Such a requirement is inherent to successful programme delivery. What seems to be really new is attempting to rigorously streamline and steer the elements of an IG programme in the holistic sense with reasonable business alignment under the motto: overcoming silos and pulling at the same rope. This is mainly the perspective of consultants who do not often talk about all the barriers and pitfalls of IG. I suggest my own definition though:

IG is the art of trusted interaction between the major stakeholders of an IG programme (IT, Business, Legal and Compliance, RIM, Security and Privacy). They aspire to joining up in order to minimise information risks to the enterprise while maximising the value of information assets through building desirable behaviours and enabling cross-functional decision making.

Information governance made its debut in the first edition of the book *Information Nation* (Kahn and Blair, 2004), which considered the concepts of managing information against the standard business model of governance, risk and compliance (GRC), where:

- Governance means the setting of corporate policies, rules, organisation, processes and controls to keep the company compliant with all these requirements under the regime of a corporate governance framework.
- Risk Management keeps the balance between internal/external uncertainties or threats and possible business opportunities (risk tolerance).
- Compliance means either a state of being in accordance with established guidelines, regulations, or legislation or the process of becoming so[6].

Kahn and Blair (2004, p. 43 ff) introduced the concept of information management compliance (IMC) in 2004 as a collaborative content oriented approach to managing information through its entire lifecycle and aligned almost all the (business) activities which are now under the umbrella of IG concepts and models in their early definition of IMC (see Table I). Later in the second edition they also stated a failure to take a holistic view in managing all these domain areas would compromise IMC, coming to the conclusion that “the GRC approach would not significantly differ in this context, as the additional risk management analysis demonstrates the risk of not achieving [Information Management Compliance] IMC” (Kahn and Blair, 2004, p. 52).

Indeed, besides the already understood need for better integration of IM disciplines – which often run and work side-by-side or against each other instead of functioning together – the governance aspect is not new either.

“The governance of an enterprise, the compliance with legal obligations and duties and the appraisal and valuation of risks go hand-in-hand” (Kampffmeyer, 2007, p. 2). So we can see that the transfer of the GRC concepts into the area of information management now equals IG. In the context of the value chain it means tying values

Business activities	Business activities
Records Management	<i>Information Risk Management</i>
Document Management	
Enterprise Content Management	Data Privacy Management
Knowledge Management	Disaster Recovery & <i>Business Continuity Management</i>
Information Security/IT Security	Customer Relationship Management
Storage Management/ <i>Digital Preservation</i>	<i>Web Governance</i>
Data Mining/Warehousing	<i>Competitive Intelligence/Analytics</i>
<i>Library Services</i>	...

Source: Based on Kahn and Blair (2009, p. 8), <http://infonation.kahnconsultinginc.com/> with further activities added by the author highlighted in italics

Table I.
Business activities based
on information
management

(including tangible and intangible assets[7]) and legal duties to information assets, so that IT can routinely and defensibly manage data, and the business is able to make decisions based on optimised information resources and systems (see Figure 1)[8].

With this as a starting point it is important to follow the holistic enterprise-wide perspective. Why is records management alone not enough? Because organisations have to master all possible information risks in a coordinated way not only retention and disposition risks. GARP clearly addresses the eight dimensions which include information security risks (protection) and compliance risks including data privacy and other risks (ARMA, 2009). Aligning IG to risk and compliance increases the visibility of the programme significantly, including RIM and the other related disciplines. To be successful it needs someone to be responsible and accountable in a sustainable manner. It does not work at zero costs. Risk minimisation only succeeds with a well funded, carefully orchestrated and multi-disciplinary governance programme. Therefore, and this is a significant challenge, we must sell the benefits of IG to the business from the start[9].

4. Some IG models

There are different IG frameworks and models to assess and measure information management and governance maturity. ARMA International has developed the GARP Principles[®] (Generally Accepted Recordkeeping Principles, GARP) in order to better sell RIM to the executive level under the umbrella of IG[10] (ARMA, www.arma.org/r2/generally-accepted-br-recordkeeping-principles). The accompanying maturity model for RIM and IG shows a complete picture of how holistic rather than solely business driven IM could be realised. There are eight Principles[®] that take account of the foundations of relevant RIM standards (e.g. ISO, 2001, 2011) as well as on best practice and legal and regulatory requirements. The Principles are: accountability, compliance, transparency, availability, integrity, retention, protection and disposition (ARMA, www.arma.org/r2/generally-accepted-br-recordkeeping-principles). For each of the eight principles a maturity model describes characteristics that are typical for each level of maturity. There are five levels of maturity: Sub-Standard (1), In Development (2), Essential (3), Proactive (4), Transformational (5). (ARMA, www.arma.org/r2/generally-accepted-br-recordkeeping-principles)

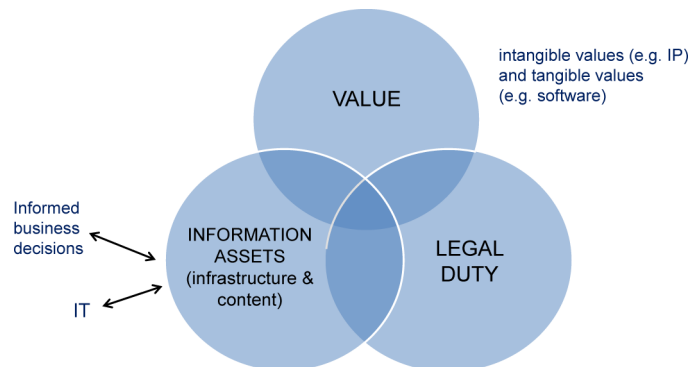


Figure 1.
The tenet of information
governance

Another model has been developed out of the eDiscovery community: the “Unified Governance Model” called “Information Governance Reference Model “(IGRM) from EDRM[11]. It has been further developed and has gained attention and acceptance mainly through the activities of the Compliance Governance and Oversight Council (CGOC) (2012), a US-based forum, established in 2004[12] (see Figure 2)[13].

The model has been recently extended by adding the element of privacy and security risks and compliance (blue area).

IBM has also developed an interesting emerging model, originally stemming from a data governance approach where RIM is covered under the domain area of “Information Lifecycle Management” (IBM, 2007). The IG categories in this model are the following:

- Organisational structures and awareness.
- Stewardship.
- Policy.
- Value Creation.
- Data risk management and compliance.
- Information security and privacy.
- Data architecture.
- Data quality management.
- Classification and metadata.
- Information Lifecycle Management.
- Audit information, logging and reporting.
- Big Data.

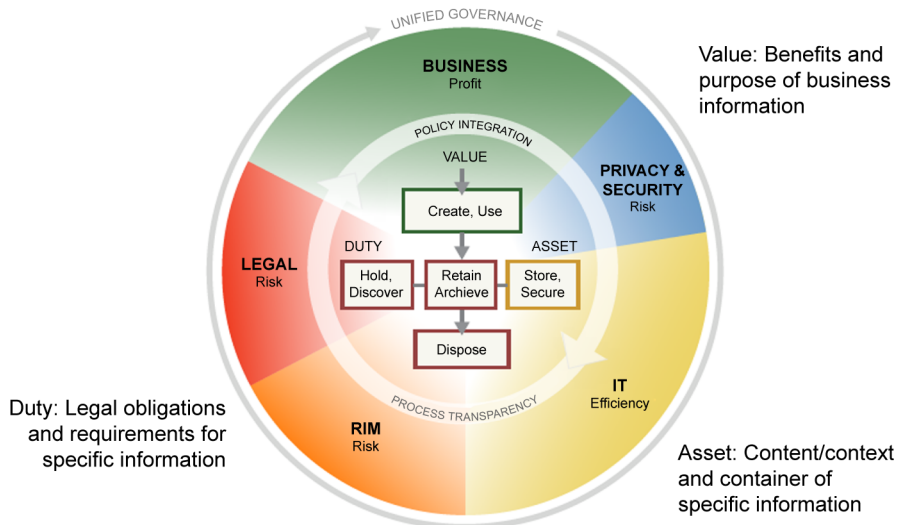


Figure 2.
Unified governance model

Similar to The GARP Principles[®] there are five maturity levels to assess the stage of an IG programme: Initial (1), managed (2), defined (3), quantitatively managed (4), optimised (5).

Due to restricted space in this article the most popular best practice control framework and quasi-standard from the perspective of IT Governance – COBIT (Control Objectives for Information and Related Technology) (ISACA, www.isaca.org/cobit/pages/default.aspx) – will not be discussed here but it has some commonalities with ARMA's GARP model in the area of non-IT related requirements, for example the dimension of "Protection" in GARP which relates widely to information security or Lageschulte and Van der Wal (2012), The latest version (COBIT5) is an extension towards governance of enterprise information management in alignment with ISO 38500 (2008), the corporate governance of information technology standard.

5. Lessons learned – IG barriers and pitfalls

In many organisations the need and call for IG comes from siloed situations where independent units in the field of EIM want to connect what seems to logically belong together. Typically, functions like RIM, Information Security, IT Risk and Compliance, eDiscovery, Business Continuity, etc. are working together more and more, and realise they should interact more closely and in a reasonable manner in order to reduce duplicate work, redundancies and overlapping reporting lines and controls. As a matter of fact too many controls in IT audit frameworks may perversely turn out to be an important driver for embarking on an IG programme because a fewer consolidated controls means less findings, less remediation, better compliance and more transparency.

When the pressure of costly organisational flaws and disconnects such as duplication of work, redundancies and overlapping activities throughout enterprise information management has become painful enough it is time that the management reacts and starts to initiate an information governance program. Such a decision is based on the fundamental insight that organisations which have adopted an institutional information governance process and programme will be more effective at seeking, collecting, processing and applying information and are getting more value from their and others' information sources.

Once the C-level (executive level, e.g. Chief Information Officer, Chief Financial Officer etc.) understands and supports the potential synergies of a unified approach the company will be ready to embark on developing an IG programme. When any new strategic unit starts from scratch to develop a vision and mission statement, new policies and an IG framework to streamline and harmonise all the necessary tasks, it is essential to remember the following possible shortcomings and pitfalls when it comes to IG design and real world implementation:

- It is highly recommended to separate governance from management. Those who do the legislation should not sit in the same unit or have the same reporting line as those who execute. This is one of the five COBIT principles based on ISO 38500 (2008) Corporate Governance of Information Technology: "Governance is distinct from management, and for the avoidance of confusion, the two concepts are clearly defined in the standard." Preferably the head of an IG program reports to the General Counsel. In the USA this point would be characterised as

- “segregation of duty” but such a requirement would not be regarded as self-evident outside the USA.
- Distinguish IT governance from IG when designing your IG programme. IT governance ensures risk and compliance of IT architecture, systems and infrastructure but it is not concerned with the way information is created, used and disposed of in order to add value to a business. The latter is the task of an Information Lifecycle Management unit or a Records/Information Management unit.
 - An IG program should not rely too much on an ICT (information and communication technology) driven audit and control culture which is another inherent limitation of IT governance. “IT governance relies on the paradigm that IT investments and the resulting IT systems can and must be controlled in order to be successful” (Koofer *et al.*, 2011, p. 196). In an ICT enabled audit, the answers are often known in advance, something that anthropologists would characterise as “entanglement” (Strathern, 2000, in Currall and Moss, 2008, p. 78). Further, a strong “audit culture is ironically the enemy of reflection, the very thing that it is supposed to support” (Strathern, 2000, in Currall and Moss, 2008, p. 78). IG professionals should rather seek to embed their roles and responsibilities in wider processes and think of scenario based incidents from real world experience to build up prevention measures. According to Currall and Moss (2008) a too rigid audit culture just follows non-negotiable control points from a rather abstract audit framework[14].
 - Professionalise IG roles: Deployment should go along with new and flexible role definitions (e.g. an information security specialist must extend his capabilities with RIM knowledge or vice versa) and ensure they are resourced with subject matter experts. Do not rely on the existing non-professional roles from the line of business which fulfil an information security or records management task as ≈ 10 per cent of their role and the other ≈ 90 per cent on their functionally prioritised role. Instead build up or cultivate from existing roles, the local or/and regional centres of excellence for IG, ILM and/or RIM expertise to ensure that optimised numbers of appropriately skilled resources are in place.
 - Implement IG as a subset of corporate governance. This creates awareness of information risk and perception of the value of information assets on the C-level (Gartner, 2009). Therefore consider all information management risks (e.g. over retention) as an integral part of enterprise risk management.
 - Assure the IG strategy and plan has buy-in from the business. Information lifecycle management is a true business necessity. Accordingly, all business areas must be adequately represented in the strategic IG advisory committee alongside other major stakeholders (IT, Legal & Compliance including Privacy, Information/IT security, RIM, Internal Audit, Business Continuity Management, Risk Management, etc.). Further provide concrete value propositions with examples and use cases for specific business functions (Finance, HR, Operations, etc.) so that the business can get practical expectations and results from an IG program.
 - Leadership. The management and administration of an IG programme requires a subtle leadership which has to balance many differing interests from various

stakeholders while tackling all the delicate issues of effective supervision, resourcing, enablement and communication. Such a role must be well empowered by the C-level and the role itself is demanding as it has to embody extraordinary decision making skills in the sense of “horizontal governing”. As Kooper *et al.* (2011, p. 196) point out “actors communicate, collaborate or co-operate without a central or dominating governing actor”. They must, therefore, know what decisions have to be made, who makes the decisions and ensure those decisions are made in a transparent way and adequately communicated.

- Advance proactive culture and change management to embed IG in the ways of working across the enterprise. Do not underestimate the importance of this necessary step or the difficulty to execute it. Many IG initiatives turn out to be a real culture shock because there is no business vision about IG and “existing cultures and organisational relationships are not conducive to the division of labour that IG demands” (Gartner, 2009, p. 3). Functional bonus and incentive systems may additionally be a potential barrier to holistic and cross-functional projects and programmes on an enterprise level.

I doubt if many corporate cultures are able to meet all these expectations to sustain the long journey of building up a true IG program due to the sheer enormity of the task. Also there are many other reasons why strategic sub-functions of IG can fail (Cecere *et al.*, 2011) (e.g. information architecture) and deadly sins prevail (Krugly, 2012). Tactically, Gartner (2009) recommends not to start with the most complex issues first but to develop an IG programme step-by-step with specific focus on the most important information assets first, followed by continuous improvement.

A study based on a survey has estimated that three years is enough to start and implement an IG programme (Economist Intelligence Unit, 2008). For complex global organisations this is not sufficient based on my experience. The roadmap and timelines depend heavily on how divisional or federated a corporate culture is and if the various business divisions have the willingness and readiness to co-operate, communicate and interact.

6. Conclusion

In concept and from a strategic view, IG is capable of initiating a paradigm shift in the world of information management. As we have seen, most of the elements and building blocks of IG are not really new as all the constituent elements and principles already exist under a well understood EIM approach. The new potential lies in harnessing all these elements by enforced integration and highly connected interaction, what Kooper *et al.* (2011, p. 197) refer to as sense making interaction, between all relevant stakeholders. In the words of Aristotle, the whole must become more than the sum of its parts.

From an organisational view the biggest challenge on the way to unified governance is the fact that no function or department alone is able to achieve the perceived goals and advantages (Pugh, 2012 p. 44). Everything depends on the culture of effective change management and extreme cross-functional collaboration (Gartner, 2012) which needs a specific sense of commitment and discipline that may or may not be part of the existing company culture. Insightful global leaders have said: “It pays to

work smarter not harder” (IBM, 2010, p. 1). Any initiative where single stakeholders do not pull at the same rope or where sponsoring executives drive their objectives with hidden agendas and rhetoric will fail.

Based on my previous arguments it should have become evident that RIM or ILMG is just one but important element in a larger IG programme. In an ideal case RIM can profit from the umbrella of an IG programme and IG activities or even move to the forefront “... records managers will have the opportunity to shape policy alongside their colleagues in the IT and legal departments” (Shute, 2012, p. 23). IG is able to evolve when the integration of the pieces can be implemented with an open partnership of equals; all relevant stakeholders co-operate and collaborate in the sense of co-governance and are collectively accountable for shared objectives. Kooper *et al.* (2011, p. 199) are distinguishing three governance approaches: hierarchical governance, co-governance and self-governance.

In terms of IG programme design, a decisive element is the distinction between Information Governance and IT Governance; Gartner (2009) and experts from the University of Amsterdam (Kooper *et al.*, 2011) have stressed this point significantly in their publications. IT Governance itself has limited value as it prioritises architecture and application/systems management over the need for best practices in information lifecycle management. Both serve a defined business purpose and add value for their agreed scope and remit. Thus it does not make sense to construct an artificial dichotomy between, e.g. RIM and IT; technology and content oriented information management only work in a complementary way and in alignment with the business to lead an enterprise to success. It is like an orchestra: tact and expertise has to be learned through collaboration and practice. The baton the conductor uses is just a tool but it requires expertise, diplomacy, mutual respect, time and trust in order to achieve the desirable behaviour. Dov Seidman (2011) has clearly outlined that the future challenge of market competition will not be a question of outperformance but of outbehaviour.

Purely hierarchical governance with rigid control and command from above will not work. It is a new world which needs new rules! IG can neither be dictated nor mandated – it must become part of the way of working and embedded in the culture. This also means that leadership of an IG programme must be resolute, patient, shared and well balanced. It would be unacceptable to just rebrand an existing RIM-Programme into an IG programme. Success is more than a name change for an existing profession.

Therefore you have to carefully examine any information governance initiative or programme for its essential elements, its specific scope and its intended impact on information lifecycle management and practical RIM in your organisation. Watch out for inadequate focus on single disciplines, one-sided (technical) priorities (without integrated intentions and coordinated actions) or on initiatives which depend on single actors or stakeholders. In such cases these initiatives would not deserve the label IG. Just perform the prime test to check if the right pieces are brought together. At the bottom line consider the big picture and answer the following question: Does your governance provide the means for an organisation to make comprehensive and balanced decisions (only) in the instances where independent groups or stakeholders cannot, or should not, make them? If the answer is yes, your information governance programme is off to a good start.

Notes

1. At the ARMA Conference 2012 in Chicago this gap has been identified in some sessions: see: Ludlow, S. and Carroll, T. Evolving RM to Information Governance to protect your organizations, online summary (blog): <http://bit.ly/VLVHmy>
2. Paknad D. Shute W. (2012): "Protecting and managing exclusive data via information governance best practices and technologies will gain greater prominence in 2013, thrusting the corporate records manager into the spotlight", Information Governance takes center stage in 2013: Spotlight shines on IG pros. *Information Management Journal*, Vol. 46 No. 6, p. 22; Bailey, S. (2008): *Managing the crowd. Rethinking records management for the web 2.0 world*, London, pp. 51ff.
3. The term ILM may be easily confused with its restricted meaning in IT: tiered storage.
4. Some organizations have already introduced the title of a director or head of Information Lifecycle Governance, e.g. IBM: see Pugh (2012), p. 48.
5. Blog Chris Walker and critics from B.T. Blair: <http://christianpwalker.wordpress.com/2011/02/23/records-matter-declaration-doesnt/>
6. Kahn and Blair (2009), pp. 135-7; I have extended some of these definitions based on my experience.
7. Assets include both tangible (e.g. infrastructure where the costs appear in a balance sheet) and intangible values (e.g. intellectual property, knowledge or the value of a brand). A study from Butler group has shown that tangible assets represent only about one third of the shared value found in the average enterprise. See: Butler Group (2005): *Measuring IT Costs and Value: Maximising the Effectiveness of IT Investment*, p. 22. From an information management perspective it is correct to consider only the value of intangible assets as Kooper (2011) does in his article, p. 195.
8. This is my own interpretation of the tenet of information governance, derived from the Information Governance Reference Model (IGRM) and CGOC material. Structural linkage of duty + value to asset, see: Paknad, D., Pugh, H. and Luellig, L. (2010) Introduction to IMRM. Information Governance Survey & Scenarios, p. 10, www.edrm.net/download/all_projects/igrm/CGOC_IMRM_May5_final_imrm-cmmttee0.pdf
9. ". . . information governance will not succeed unless the business understands it, buys into it and supports it." Cengiz Barlas, Vice President and global head of data management at Premier Farnell quoted on the back cover of the book by S. Soares (2011): *Selling Information Governance to the Business*, Ketchum (MCPress), www.mcpressonline.com/trends/new-book-helps-practitioners-make-a-business-case-for-information-governance.html
10. See: Lederman, P.F. (2012), Getting Buy-In for Your Information Governance Program, *Information Management Journal*, Vol. 46 No. 6, pp. 34-7, see also Datskovsky (2012).
11. Electronic Discovery Reference Model – www.edrm.net; Information Governance Reference Model/© 2012/v3.0/edrm.net
12. Compliance Governance and Oversight Council, www.cgoc.com
13. See: www.edrm.net/download/all_projects/igrm/The-Final..-IGRM_v3.0Update-Whitepaper_Oct_2012.pdf
14. "Such an attitude to the curation of information is hard to convey because it is at odds with much archival and records management discourse that has responded to the culture of audit and compliance with non-negotiable 'thou shalt' commandments, rather than seeking to embed their roles and responsibilities in wider processes" Currall and Moss, 2008, p. 78 citing the work of JISC.

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