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Information Governance: Beyond Risk and Compliance

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Abstract: Information Governance is a logical and necessary development in organizations to benefit from the information society. This subject is becoming increasingly topical, mainly from a risk and compliance perspective, so a critical inquiry is appropriate. In this article the authors consider a number of aspects of information governance that go beyond the traditional thought of risk and compliance. CIOs are going to face serious challenges in the extensive digitalization of society with a rapidly expanding digital universe that is constrained by the continuous emphasis on IT cost reductions. The authors question whether the today's CIO has adequate tools to effectively focus on policies and developments that are information-centric.

Keywords: Information Governance, IT Governance, Data Governance, Information Management

1. Introduction

The digitization of our society deserves more attention at board level because its effects may raise strategic questions. The transformation from paper to digital, for example, goes beyond the issue of traditional information lifecycle management, which focuses solely on selectively storing data. The increased accessibility to various data sources makes is it much easier to combine these sources into new information. Besides legal requirements to retain data, its storage also offers organizations new opportunities. The digitization of society leads to new platforms that provide organizations better information sharing, knowledge building, and decision making. The examples are numerous and we can find them for example in social networks, new media, business intelligence, and collaboration management. As information becomes increasingly easier to reproduce, organizations will face an explosive growth of (digital) information and the ways it is presented and used. An understandable, but slightly contorted reaction of most CIOs is to focus on the risks that come with this growth. But modern and reliable organizations may also expand their ecosystems and exchange information with external parties such as customers and trading partners to create new opportunities with information. These loosely coupled organizational structures will introduce more interactive digital work forms that will replace the traditional process-oriented work place (Butler et al, 1997; Johnson, Manyika & Yee, 2005).

The opportunities these developments offer, urge organizations for a well thought-out plan with smart policies for the use and sharing of information. Although not yet well known, information governance is a logical but necessary development. With information governance, we focus on the control questions: 'What information do we need?' 'How do we make effective use of (existing) information?' And, 'who has the responsibilities to do that?' Information governance arose from the idea that:

- information is of primary importance to the business and must be governed independently from the underlying technology;

- governing information should be set free from the constraints imposed by compliance and control;
- the concept of 'information' or 'interpreted data' implies that its governance must consider, besides a technology perspective, also intangibles such as interpretation and meaning.

In this paper we will merely focus on the 'opportunity side' of information governance. The control and compliance side of information governance, concerning leaks, insider trading, industrial espionage, identity theft, credit card information, and spoliation charges if information is destroyed prematurely, has been extensively explored by, for example, Sundt (2006), Hörnqvist (2006), and Phua (2009).

2. Increasing relevance

The term governance is ubiquitous in the business. Corporate governance is the discipline that focuses on the proper functioning of management, a process that essentially interests the board of directors, shareholders and management. IT Governance, a sub discipline of corporate governance, is an established concept for the governance, performance and risk management of IT systems. The growing interest in IT governance is primarily due to compliancy initiatives such as Sarbanes-Oxley and Basel II, and the notion that IT projects often run 'out of control', and contribute little to the performance of an organization. Based on the idea that the success of IT largely depends on controlled investment, the concept of IT governance ignores information-based developments in organizations. Instead of long lasting value creation from an information perspective, IT governance focuses more on short term shareholder value, controlled from a cost perspective. In other words, IT governance is about how an organization must ensure its IT systems, but forgets the sheer reason for the existence of these systems: information and how we handle it (Kooper, Maes & Roos Lindgreen, 2009).

Organizations, governments, IT suppliers allegedly have an increased attention to the concept of information governance, but their dominant line of thought is about the accountability rules for storing, distributing and using data. This traditional thinking in terms of risk and compliance in information governance is not surprising. For example, there are times when information for an organization can even be a liability. Our interests go to the aspects of information governance that go beyond this thought. We want to show that information governance gives opportunities to create a climate in which organizations and its users can assign meaning to information and share it purposefully.

3. A broader perspective

There is evidence of a growing awareness of the value of information governance. A study by The Economist Intelligence Unit in 2008 showed that 77 percent of respondents to their survey said that enterprise information governance would be important for the success of the company over the next three years, compared with just 49 percent today (The Economist Intelligence Unit, 2008). Many organizations are looking for practical governance solutions that help to benefit from the growing digital universe, while simultaneously wish to limit the risks when it comes to electronic evidence such as privacy-sensitive business information or intellectual property. An appealing example is the

information governance program at NHS Connecting for Health, a directorate of the English Department of Health (see www.connectingforhealth.nhs.uk). Information Governance is a very topical issue in health care, but is strongly focused on standards for access, storage and transportation, compliance, codes of practice, etc. all in relation to patient-oriented data and IT systems. Although very valuable and important, after all, data is the foundation for information and knowledge organizations, this form of information governance is very technocratic in nature.

Also suppliers are increasing their focus on information governance as demonstrated by the introduction of new professional services, for example, to set up governance frameworks, but also hardware and software products that perform information governance measures easier. These are often significant programs to protect data, structured and controlled, mostly to store, search, and develop into a valuable asset. Typical are the projects for archiving, records management, document management, enterprise search, business intelligence, and more.

This growing awareness of information governance is a welcome development, but it is questionable, whether the current practices of information governance adequately assist organizations with the information-based developments in our society. Despite all available technology, not every information worker will follow the norms in dealing with business related information. Organizations are becoming transparent network organizations, social networking is entering the business realms, and we see a proliferation of unstructured data and often meaningless information ('infoglut'). The current information governance thinking is too limited. The focus is primarily on company-wide standards and guidelines for the management and appropriate use of information. Information is mostly owned and managed by individual business units. Their governance processes typically are about quality control, standards, and guidelines, often filled through 'good stewardship' of processes for information sharing. That is, organizations treat information as a strategic asset and discard the subjective wealth of its meaning to the organization and its users. To give one example: misinterpreted information can severely damage the branding of organizations or individuals.

It would be unfortunate if information governance degenerates into a merely technological tour-de-force for securing maintenance, availability, security and confidentiality of information. The terms data governance would then be more appropriate to use (Beijer, 2009). Let us explore the potential of information governance and its constituting concepts 'information' and 'governance' against the background of developments in organization and the information-oriented society.

3. The emancipation of information

We already mentioned here, the term 'data governance' to distinct data from information. Too often these two terms are interchangeably used. This is not surprising; information as a concept is complex and difficult to grasp. Our use of information technology in general is a source for confusion and we tend to see information as a product of technology, while information in essence contains subjective 'interpretation' of objective facts. The American influence reinforces this view as the difference

between data and information is hardly addressed. In essence, information is a human interpretation of objective facts or data.

It has lasted, however, a few centuries before this interpretative view developed. Previously (late 17th century and the 18th century) information was perceived as a kind of absolutism. The shape and structure of information had to fit into the prevailing world-view, as well as the political, social or scientific ideas. The history of art or science confirms this very clear. How different is the status and meaning of information in the late twentieth century. Information as a true knowledge of reality no longer exists and an interpretive view on information developed instead. No longer do we see information as something factual, but as constructs of meaning and systems that produce meaning, like, for example, our language. Today we use information in the context of the human world where multiple meanings abound. It is part of our continuous process of constructing meaning (Vreeken, 2005).

This emancipation and democratization of the concept of information evolved into a codify-able and tradable commodity that culminated in the dotcom era. But information can also be increasingly seen as a medium around which people organize and socialize. This is overly demonstrated by the growing number of Internet technologies for social networking. Platforms like eBay, MySpace and Twitter and online games have become an integral part of our society. If we consider how neoclassical economics influences information exchange, transfer and usage, and that the model of the perfect market dominates to realize value (Huizing, 2007), we can notice that the subjectivist view on information has lost attention. The shift towards information-centric thinking much more reflects to the individual, because information is the source for more personal value when people affiliate with it. Put differently, there is an increasing level of subjectivism concerning the concept of information. This is illustrated with characteristic keywords in Table 1.

Table 1 Characteristics of the emancipation of the concept of information

Late 17th and 18th century	Yesterday	Tomorrow
Scarcity	Objectification	Abundance
Given / Truth	Constructs	Choices
Certainties	Concepts & models	Values / Personal
Norms	Measure & control	Independent
Unilateral meaning	Economics of data	Economics of meaning

The extensive digitalization of our society has made the reproduction of information much easier than its production – 'create once, copy anywhere.' It is increasingly difficult to find our way in this if we constrain ourselves to our traditional informational frame of reference on norms and standards (Shapiro and Varian, 1999). The complex and multifaceted nature of information gives enough reason for a careful consideration of the governance of information – just governing on compliancy is not enough. The obvious question then arises: what exactly do we mean with governance?

4. What is governance?

Governance seems an elegant word that the IT industry is using to impose structures that should result in predictable behavior in IT organizations. Sometimes we see the miraculous comparison of governance, with the helmsman on a ship. The concepts of governance go far beyond this limited view. We have seen in our vision on information and socialization that we need to govern information beyond rules and standards to properly make use of information. Governance processes take place in a dynamic world of great diversity and complexity, where creativity and intuition are equally important as goal directedness (Kooiman, 2003). The interpretation of governance heavily depends on such contexts, and organizational culture. Theory on governance distinguishes between 1) hierarchical governance, where top-down direction and control for enforcing regulations is the dominating paradigm, 2) co-governance, in which networks of various parties pursue common values for the benefit of all members, and 3) self-governance, where the search for identity through the use of values and codes of conduct is centre of gravity. In these modes of governance, governing elements (tools, (inter)actions, imaging) are used that relate to, for example, regulations, finances, knowledge, motivation, power sharing, learning and implicit truths (Kooiman 2003).

With the development of information as described above, we see that information governance relies on the combination of the three modes of governance: hierarchical governance, co-governance and self-governance. Meaning and sense-making take a central role in this (Maes & de Vries, 2008; Weick, 1995). Our interpretation of information governance therefore also includes the creation of a good climate, in which people can give meaning to information, enabling them to perform their daily activities, something IT governance does not include in its considerations.

5. Governance for information-based developments

The IT governance line of thought has a number of implicit restrictions with undesirable consequences. First, it fails to address how organizations handle information (creation, use, etc.) to create business value. IT governance limits itself to the purchase and care of IT systems (Weill & Ross, 2007; Gremsbergen van & Haes de, 2007). The most basic information-related issues thus remain unanswered. Some examples:

- the creation of management information for timely information on the relevant performance indicators of an organization;
- communicating with other actors in a value chain on stock supplies, or the entire end-to-end business performance;
- effectively handle customer information of value;
- the use of Internet communities to find potential customers.

Secondly, IT governance focuses strongly on the control side of the business domain. Administration regulations, responsibilities, authorizations, reporting, monitoring and auditing are often driven by top management. Development issues that every business has to face, such as entrepreneurship, innovation, creativity, improvisation, experimentation and value creation, are carefully ignored by the concept of IT governance. This top-down approach leaves little room for IT-driven development

strategies, and making the gap between business and IT even bigger! That is a logical consequence because IT governance has its origin in the auditing world and not with IT professionals and business professionals. The IT Governance Institute, for example, the publisher of COBIT (Control Objectives for Information and related Technology), was a member of ISACA (Information Systems Audit and Control Association). The approaches and frameworks for IT governance are peppered with audit jargon and are therefore not popular with business and IT.

How can the Chief Information Officer (CIO) find his way in this auditing world when we consider that the world around us is full of information-oriented developments? There are big challenges ahead of the CIO: an extensive digitalization of society with its rapidly expanding digital universe while we increasingly see IT cost-reduction programs in the IT landscape. Does today's CIO have the means to actually implement an information policy? Information governance can help CIOs in the search to find answers to questions like:

- how information can be meaningful for the business;
- what information can bring to balance the exchange between organization and ecosystem;
- how passive information users can be converted into active knowledge workers;
- how organizations (competition) could benefit from the wealth of information.

The answers to these questions are constrained due to legislation, policies and guidelines. For example, how do CIOs choose between privacy laws and information-in-the-cloud, or, between the code of information security and the free market? Information governance carefully tries to find a balance between control and opportunities. We welcome the concept of information governance for the many information-oriented developments ahead of us, but if organizations want to reap the profits, they should implement information governance in a well-balanced manner. This view is illustrated in Figure 1.
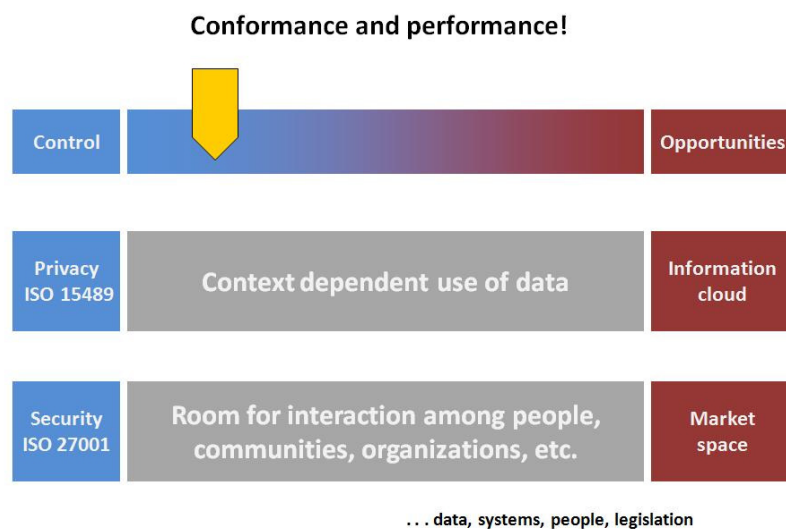

Figure 1 Information governance: balance between control and opportunities

6. Relationships with other disciplines

It is naive to claim that information governance is a completely new discipline. For years disciplines such as information management and knowledge management stand up for a context-driven management of information sharing. Thanks to developments in these areas, awareness on information has significantly increased. Other forms of governance such as financial governance as well as accounting have strong relations with information governance. They interpret governance predominantly from a financial perspective, whereas information governance is focused on the generic or common aspects of context-driven governance. The central question here is: what information specific aspects can be found in these other forms of governance, including corporate governance, financial governance, as well as human resources (HR) and business governance? On the compliance side of governance, we can recognize trends that look like information governance. Think of the privacy legislation or the rules around intellectual property. Typical for these legislations and rules is that they offer guidelines, directives, and requirements for generic information; information that only may be used within a specific context.

Another relation can be found with data governance. If we consult the literature we see data governance and information governance used interchangeably (Economist Intelligence Unit, 2008, Donaldson & Walker, 2004; www.data governanceinstitute.com). Yet data governance is mainly about data assets in information systems, while information governance concerns the interactions between people, and between people and systems. Developments in data management, records management, etc. all are within the realm of data governance.

The disciplines on IT architecture and business architecture develop principles and frameworks on the relationship between business, information, data, and systems. These concepts very well can have added value to information governance. Also, the discipline of collaboration management has a relation with information governance. The developments within that discipline cannot do without the use of information governance. It is a tool-driven development (Microsoft SharePoint, Lotus Collaboration Management, IBM Document Management and Collaboration) wherewith organizations are trying to support their information and knowledge processes. Without information governance this is a very difficult task!

7. What does information governance brings us?

Many probably will question whether another explicit form of governance is needed. Yet we are convinced of the usefulness and necessity of information governance, for two reasons. First, organizations spend relatively little time on the real information issues, and consequently miss to unleash the potential of all sorts of tooling that aims to share information. Apart from the purchase and implementation of such systems, CIOs also need to consider their actual use. With the right mandate and support and with the principles of information governance the implementation of such tooling can be effective and valuable. Secondly, we have little understanding of the effects of the ever-increasing digitization of society and organizations. The digital universe and the associated quantity of infoglut will continue to grow. Cloud computing and similar developments will most likely reinforce that

organizations can combine more and more data to create new information. This process of information overload is not manageable without a workable governance framework.

Information governance is a rising avant-garde development but its precursors such as data governance and data quality concepts have barely been assimilated. Yet now is the time to investigate the possibilities of information governance. It places related forms such as data governance and IT governance in a better perspective and offers organizations an appropriate conceptual framework for the information-driven developments of tomorrow. Not only to better anticipate future informational developments, but also to stimulate innovative concepts around the use of information in networked organizations exploring loosely coupled organizations.

8. Conclusion

It is interesting to see how the concept of information governance will develop itself. The developments in compliance and monitoring will be tough and might dominate the discussion, because there is an increasing need to expand the guidelines in these areas. Especially the privacy laws, property ownership, and authorship are of great interest in our growing information society. The creation of frameworks for records management and archiving will only accelerate, because compliance and security officers are facing increased responsibility for the (still) growing digital recording of information. If this control perspective drowns out the creative perspective, because of the anxiety to break privacy laws or to be unable to prevent industrial espionage, then this may lead to building larger digital fences around data resources. If an organization is able to keep an open mind and takes sufficient advantage from a creative perspective, then it may be able to increase the value of information. Currently it is mainly the different business functions that take focus on information-centric developments. These are often specific to their goals and have little interest for common needs. Mutual use of information and optimizing the generic aspects of information sharing offers synergies. From a governance perspective these can best be achieved if the responsibility for information governance is held centrally. The CIO should take the lead in this initiative. We expect organizations that are ahead of these developments can positively discriminate themselves. Information governance is here to stay; it offers great potential for information-oriented developments. Its implementation, however, should equally consider its constraining perspective and its creative perspective: from very strict, such as compliance, to create space, such as Wikipedia.

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