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## **Meaningfulness in Information Governance: A new literacy is required**

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# **Meaningfulness in Information Governance: A new literacy is required**

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## **Abstract**

The concept of information governance is rapidly gaining ground. In this paper, I argue that its future is worrying if information governance would restrict itself to the (objectivists) domain of preservation and availability. Through illustrations, I emphasize that information is polymorphic and poly-semantic by nature, which motivates for *meaningfulness* in information governance. This should solve the semantic problem: how does information acquire truth and value in the organization, and the ontological problem: how can we represent the meaning of information? This realm of thought suggests research to a literacy that gives room for expression of the meaning of information in organizations.

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## **1. Introduction**

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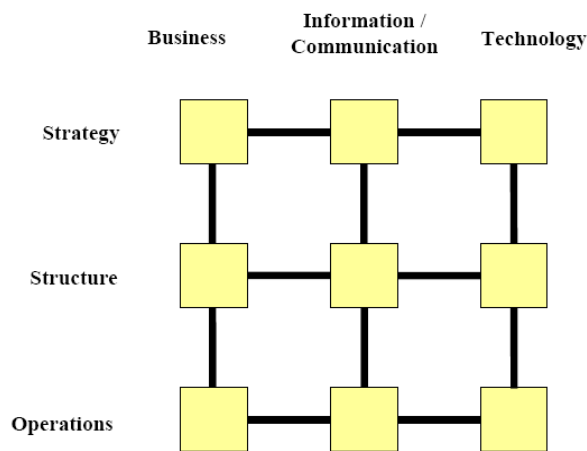
In this paper, I propose research to instruments that are helpful to define information strategies that include the subjective wealth of information and its meaning to its users. It does so against the background of the emerging concept of information governance. This paper will not be a technologically deterministic treatment of the topic, although technology developments do have a profound effect on the scope and orientation of information governance. The organization of this paper is follows. I first reflect on the concept of information governance after which I elaborate on the changing character of information through time. I then describe an example of how the meaning of information plays a role in organizations, followed by the growing independency of information in social practices. This paper ends with a proposal for meaningful information governance and concludes with a suggestion for research.

## **2. Information governance at risk**

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To name information the lifeblood of organizations might be an overworked subject, but the fact remains that information is the reason d'être of many human made concepts like markets, democracy or organizations. With respect to the importance of information, the concept of information governance is rapidly gaining ground; I argue though that its future is worrying. The governance of information focuses on enterprise wide standards and guidelines that apply to care and appropriate use of information owned and managed by individual business groups. When business groups share information across the enterprise or its ecosystem, it associates costs and risks. The information governing process typically involves the supervision on the quality of the standards and the guidelines through stewardship of processes that are involved in sharing information. This conventional notion of information governance is concentrating on a resource-based view on information. That is, organizations treat information as a strategic asset and discard the subjective wealth of its meaning to users. In tough times, information can even become a liability; no wonder why organizations equalize the concept of information governance with risk management and regulatory compliance. There is empirical evidence that the information management discipline is heading towards a too much objectivistic – or better technocratic – interpretation of information governance: the alignment of systems and technology to ensure the preservation, availability, security, confidentiality and usability of information. This will probably lead to the similar noble ambition as with Business/IT alignment, albeit then focused on information, or even worse in this context: data. The terms data governance and Business/Data alignment would then probably be more appropriate to use.

The integrated framework for information management (Maes, 2007) in Figure 1 is based on the vision that the management of information is not the exclusive working field of the IT department but concerns all strategic, structural and operational information-related issues in an organization. In this vision, the CIO (Chief Information Officer) orchestrates the information-related activities of an organization represented in the framework. Maes (ibid.) notes that the CIO can find his main set of tools in the middle axles of the framework. The middle column elaborates on the processes of information and communication (I/C); at the strategy level of the framework, this converges to what kind of information is of strategic importance to do business.



**Figure 1: An Integrative Framework for Information Management**

This is where the concept of information governance finds its home. According to Maes (ibid.) the scope, core capabilities and governance are all part of the strategy of information and communication processes; we cite this in Table 1.

**Table 1: Elements concerning strategy level of information and communication processes**

I/C scope	<ul style="list-style-type: none"> <li>• To determine the organization's generic external (e.g. what kind of information do we want to share with customers?) and internal (e.g. who owns and interprets the information?) I/C strategy.</li> <li>• To assess societal evolutions in the use of information, e.g. the advent of communities, the use of social software, etc.</li> </ul>
I/C core capabilities	<ul style="list-style-type: none"> <li>• To determine the organization's overall strategy regarding knowledge management.</li> <li>• To determine the differentiating capabilities for using and sharing information (the forming of an information sharing culture).</li> </ul>
I/C governance	<ul style="list-style-type: none"> <li>• To develop guidelines for the appropriate use of information.</li> <li>• To decide on strategic partnerships for information sharing.</li> </ul>

The very nature of information implies that its management should also include immaterial elements and concepts (as e.g. interpreting and sense making) and the often-overlooked phases of the information processing cycle (as e.g. sensing the environment) (Bryant, 2007) (Huizing, 2007a) (Introna, 1997) (Choo, 1996). In the framework, these are at the heart of the I/C column. Maes (Maes, 2007) notes that this column should link the objectivist (“data”) view on information with the subjectivist (“knowledge”) view of the business. He emphasizes that the world behind the I/C column is greatly underestimated and neglected, resulting in a misunderstanding between IT departments and the remaining part of the organization due to technology dominated thinking. Information governance seems to be an excellent instrument for the CIO to solve this problem, but it implies the involvement of the ambiguous (subjectivist) elements and the concepts I refer to.

To achieve a deep organizational understanding of information so that we can govern it effectively, we should seek to instruments that provide a practical application of dealing with the subjectivist view on information in the organization. In this paper, I will further elaborate on this and argue that an inquiry to develop those instruments is beneficial. In here, I will discuss briefly some parts of the phenomena of information, alongside with a real-world example to exemplify some aspects of the issues I raised.

### **3. The many forms of information**

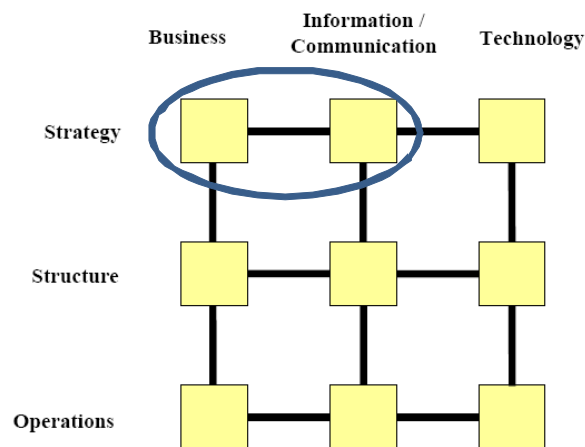
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Besides that information as a concept is complex and difficult to grasp, our use of IT (Information Technology) in general is a source for confusion concerning the concept of information. We tend to see information as a product of technology, while information in essence contains subjective *interpretation* of objective facts; in other words, interpretation of data (Introna, 1997). This has not been always the case though. Back in the late 17<sup>th</sup> and 18<sup>th</sup> century information was considered only to make sense when it was put into a context like a form, a structure, or gave authority to a political, social or scientific idea, that in itself had to match a clear worldview (Postman, 1999). At the end of the 20<sup>th</sup> century, the status and meaning of information changed. Vreeken (Vreeken, 2005) explains in his study on the history of information that information as true knowledge of reality by then did not exist anymore and that an interpretive view on information developed instead. No longer did we see information as something factual but as constructs of meaning and, systems that produce meaning like for example 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, *ibid.*).

Increasingly we see organizations declare information as a strategic asset. This idea has a rather dual character; is information treated like a codify-able and tradable commodity or treated as a virtue of the

information workers in the organization? To explore information management and information governance in specific we need to consider carefully the nature of information as it is complex and multifaceted. The emergence of the philosophy of information (Floridi, 2008) can help us here. It searches for an integrated family of theories about (1) the various principles and concepts of information, (2) their dynamics and utilization, with special attention to systemic issues arising from different contexts of application and (3) the interconnections with other key concepts in philosophy, such as knowledge, truth, meaning and reality.

As a polymorphic phenomenon and a poly-semantic concept, information can be associated with several explanations, depending on the level of abstraction adopted (Floridi, *ibid.*). This underlines the ambiguity we can expect on the strategic level indicated by the framework for information management I have shown earlier. In the remaining part of this discussion, I choose to concentrate on the strategic meaning of information and its utilization in a wider sense to the business, henceforth leaving behind the technology environments that support the information processes in the organization; inevitably, technological developments have a profound effect on the scope and orientation of information strategies. Figure 2 illustrates this choice within the framework for information management. In the next section I will discuss the role that information can play in organizations, to be more specific, the meaning and usage of information in organizations.



**Figure 2: Scope of inquiry**

#### **4. The meaning of information in organizations**

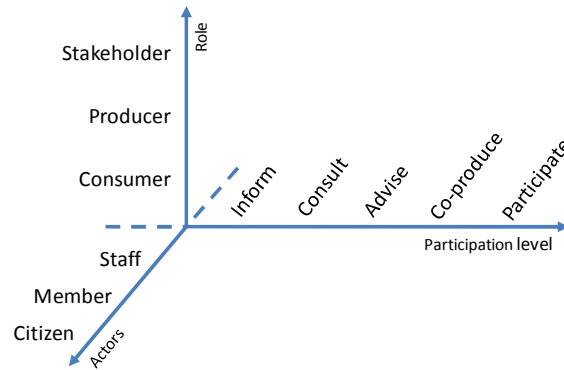
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To illustrate that information can have many meanings to actors in an organization I will describe some aspects of the information practice of the House of Representatives from The Netherlands, a parliamentary democracy (Beijer & Meer van der, 2008). The many type of actors with also varying roles in a parliamentary organization exemplify that the same information can have multiple meanings to actors. As we will see this sometimes even concerns the same actors.

Central in a parliamentary democracy is the interplay between Members of Parliament (MP's) and citizens (individuals and organizations, private or public), supported by the parliamentary staff (political parties and civil servants); they are the primary actors. Their interaction depends on the subject, the moment, their role (e.g. parliamentary groups like a committee) and the level of individual interest. A parliamentary group can involve others to form their opinion for political decision-making. The type of involvement depends on the varying role of various participants in the parliamentary context; this can be a producer of information, a consumer of information (the informative process of the Parliament to citizens) or a stakeholder (user). The parliamentary context allows any of the three primary actors (MP's, citizens and staff) to obtain that role, all very much depending on the moment or situation. These varying roles all have a different information-need; this makes the information function of the Parliament complex and challenging. In producing, consuming or using information, the information department distinguishes five levels of participation in their various information processes:

- Informing – basic information provision to the public
- Consulting – finding the meaning of the information at hand
- Advising – the information at hand is enriched with knowledge and experience
- Co-producing – external actors contribute to the information processes
- Participating – active contribution in the political decision making process.

The following picture illustrates the interaction of the primary actors within varying roles and levels of participation.



**Figure 3: Varying roles and participation level of primary actors**

The story with the above illustration unfolds as follows. As an example, at one moment MP's can be consumers of information by means of an information consult, a short moment later they can be producers of information by influencing a debate in a plenary session as actors in the democratic model. Another example is the situation when a ministry's policy proposal affects citizens. Citizens want to voice opinions and contact various MP's by email. The response from various parliamentary groups may vary; some can ask citizens to clarify their stand in a meeting, others can merely state that their opinion has been noted.

The dynamics in a parliamentary organization are high; the combination of information related roles could change any moment even on short notice. This involves the type of information, its abstraction level and its form. Moreover, depending on the primary actor involved the meaning of information changes. For example, the proceedings of a parliamentary session are for a civil servant just another item to publish, while for a political party it could mean a change of strategy. To put this to the extreme, if for example a political issue involves a parliamentarian's private situation, the meaning of information is even situational due to the actor change.

This example demonstrates that information is subject to different meanings in an organization. This matches Huizing's subjectivist view on information concerning people. *"People differ in their goals and ambitions, have different mental frames of perceptions, sense making and evaluation and they live in varying cultural, social and institutional contexts. [ . . . ] For all these reasons, divergent understandings might result from the same data. Even the same person might arrive at other meanings in other contexts"* (Huizing, 2007a). Until now I positioned information as being human-centric; that is, as in the individual-information relation as consumer and/or producer. This raises an interesting question whether there are cases of information-centric relations. To be more specific a case when individuals organize themselves 'around' information, affecting the social.

## 5. The meaning of information as identity

Allegedly the increasing popularity of internet technology for blogs, forums or social networking services like Ebay, Myspace, etc. demonstrate us that internet objects become meaningful to its users (subject). Moreover, virtual worlds such as Second Life and interactive online games engage millions of users to participate. People’s lives increasingly occur around objects such as websites, games and social networking (Huizing, 2007a). Knorr-Cetina (1997) uses the term “*object-centered sociality*” for this phenomenon. I submit that it might be better to use the term “*information-centered*” sociality for those cases where *information* is the center of gravity. In terms of the parliamentary example I described above, this is the case for example when people support ideas of a political party, or a more business-oriented example is where social practices exist around “*the sales-figures of the month*”. Whether we produce this information with the help of ICT or with other forms of information systems, it produces understanding, truth and meaning. People affiliate themselves with information and behave accordingly; their lives increasingly occur *around* information.

Furthermore, I believe that our thinking about the concept of information needs an update. To elaborate on the evolution of information I sketched earlier in this paper, we see that information tends to get its own ‘identity’. The change from information as true knowledge of reality (18<sup>th</sup> century) into constructs of meaning (yesterday) will extend into informational identity (tomorrow). To illustrate this process, the following table pinpoints some keywords that characterize information in its various forms and context through time. By no means is this list complete, it just serves to illustrate this evolutionary process.

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

In the late 17<sup>th</sup> and 18<sup>th</sup> century, information was relatively scarce and very much imposed by institutes like for example the church who defined the norms and meaning to people. There was one absolute fundament for knowledge, political order, ethics, and so forth. 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, 2007b), we can notice that the subjectivist view on information has lost attention. The shift towards information-centric thinking (tomorrow) much more reflects to the individual

because information is the source for more personal value when people affiliate with it. More precisely, an increasing level of subjectivity.

## **6. Meaningfulness in Information Governance**

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The discussion so far elaborated on the issue I raised, that information governance would need to include subjectivist perspectives to achieve the required deep organizational understanding of information. I did this by illustrating that information has various forms and came a long way to evolve into a concept that includes meaning. This was underlined by a practical example how information can have various meanings in changing contexts to the same individual in an organization. A further motivation arises from the idea that information can become the center of gravity in organizations as it increasingly becomes an identity on its own; something I would call *information-centered sociality*.

The customary information related practices of organizations today, are practices in which pursuit for efficient deployment of information technology is leading; central in this is that we reduce information to something that we can codify and commoditize. The contrary motivations I discuss in this paper would lead to the meaningfulness in Information Governance that helps the CIO to create organizational understanding needed to shape daily business activities by the effective application – use and creation – of information. The consequence is that information governance must *meaningfully* distinguish data, information and knowledge; something an objectivist perspective omits to do so as it excludes sense-making (Huizing, 2007a). All together, this would lead to additional questions for CIOs when putting information governance into practice in organizations, like for example:

- How can information influence organizational truth and meaning?
- How much can meaning change the informational context?
- How and when is information meaningful to the business?
- How can information enable reciprocity between organization and ecosystem?
- How can passive information consumers become active communicators?
- How can organizations gain from the abundance of information?
- How informational is the current technology strategy?

Not in the least, this is a complete list but the answers to these questions deeply affect our understanding on how we can put information governance meaningfully into practice. There are two problems that resonate in these questions: (1) a semantic problem – how does information acquires truth and value and (2) an ontological problem – how can we represent information meaningfully? It is my conviction that

these problems are partially the root cause of the fundamental disconnect we unwittingly create (!) in the quest for Business/IT alignment (Beijer, 2005) and now potentially with information governance. We do not seem to know the right universe of discourse to practice information governance. Are we not suffering from informational illiteracy to facilitate the dialogue as what Maes (Maes, 2007) calls management of meaning? I think the two problems I raised deserve a closer attention.

## **7. Conclusions and suggested research**

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Central in the realm of thought here is the representation processes on how to have information acquire truth and value in facilitating the information strategy in organizations (see Figure 2); meaning and sense-making are paramount in that. The fact that information requires a representation does not entail that the latter ought to be physically implemented (Floridi, 2008). However, as Maes and de Vries (Maes & Vries de, 2009) note, we still struggle with excessive formality that has nestled itself in the language of information plans, architectures and so on. They plea for a ‘languageability’, that motivates to explore the innovative possibilities of the application of information and technology without being dominated by technology views; the question they raise is, how? This is challenging as Postman (1999) points out, a linguistic rendering of reality only has meaning when there is a coherent series of statements; if we remove one sentence or even a word of a text it disrupts its meaning. Huizing (2007a) explains us, that it lacks a single coherent framework and well-established paradigm, such as the perfect market in the objectivist worldview, which could support organizations in organizing their information and knowledge. The observations from both Huizing and Maes & de Vries emphasize that practicing information governance needs a different literacy, one that gives room for expression of the meaning of information in organizations. All things being considered, it seems to me it is worth the effort to search for the necessary conditions for practicing information governance and instruments that can be supportive in this – finding truth and value in information and representing it meaningfully.

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