What is Information Management?

- an investigation of meaning creation through discourse and construction

Master Thesis

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Executive Summary

The emergence of the Information Age in the latter half of the 20th century, has led to an increasing recognition of the role of information in today's global world. This acknowledgement of information and the challenges and opportunities that it brings with it has resulted in the development of new concepts to assist in the structure and management of information. One of these is Information Management.

Although Information Management has been widely adopted by both scholars and practitioners within many different fields, a confusion still remains in terms of what is actually implied and meant by the term.

In my thesis I have sought to establish an understanding of the meaning of Information Management and the constructive elements that make up the term. The objective of my investigation has been to identify possible components that have made up the Information Management concept since its emergence in the 1970s, as well as the link these components have to practical use of Information Management today.

With a base in the scientific perspective of constructionism, my research was divided in two main areas: 1) the identification of the constructive parts that have made up the understanding of Information Management as a concept throughout its academic history and 2) the link which these constructive elements can have to practical use of Information Management.

For the investigation of the first area, 15 academic texts, dealing with Information Management and dispersed over time from 1970-2010, were selected according to therefore established criteria relating to significance and word use. The texts where then subjected to discourses analysis through my developed approach investigating the intertextuality, generalization and meaning for creation of concepts and, the semantic relation to the meaning of Information Management within each text. From this analysis, I was able to identify eight main constructs for meaning creation within Information Management. The constructs described implications for Information Management ranging from the view of information, to the tools applied and the outcome gained and to the nature of the concept.

On the basis of this, the second facet of my research dealt with a discussion of the practical link of the constructs to current discourses of Information Management within two companies, Platon (a Danish information management consultancy company) and the Business information management department at Capgemini (a company providing outsourcing and technology guidance). Through this discussion it was identified that the eight information management constructs created were to a high extent reflected within the practical discourses, however the meaning varied in some cases according to the meaning discovered within the academic discourses. These findings were made visible in a table outlining the constructs, their theoretical meaning and their practical link.

The outcome of my research has been the creation of eight Information Management constructs describing implications for Information Management ranging from the view of information, to the tools applied and outcome gained, and further to the nature of the concept. The identification of the practical link of the constructs within the two company discourses allowed meaning for Information Management to be composed in terms of the eight Information Management constructs and their theoretical and practical relation. The tie between the historically discovered constructs and the reflection of them in current practical discourses, has led me to conclude that the created Information Management constructs identified could present the basis for current and future creation of meaning and interpretation of Information Management. I believe that opting for more research within these constructs can enable a move towards a united field of Information Management.

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In addition, a CD-ROM is attached on the last page containing full text pdf's of the 15 chosen academic texts.

1. INTRODUCTION

What is in a name? This sentence became famous when Shakespeare's Juliet questioned the meaning that was inferred within the name of her Romeo. The underlying notions of this phrase is one that puzzles many when creating meaning from a word, a sentence or a concept. To a high extent the meaning creation can be tied to the context, situation and society within which it exists. Foucault (1966) introduced how changes in society can carry with it many new interpretations and understandings of concepts that already exist as well as coin new concepts. Giddens (2009) also presented how the process of concept and meaning creation has emerged many times through the development of societies from the rise earliest Mayan societies, through the industrialization and in later years the information society.

The emergence of the Information Age and the following digitalization of information that arose in the latter part of the 20th century has led with it increased awareness of the opportunities and challenges related to information retrieval, storage and handling. To tackle this, new concepts have appeared, all dealing with the way in which information can be captured and shared through processes and application. One of these concepts is Information Management.

Information Management has become an increasingly applied and recognized concept. It has gained further attention with the introduction of the Paperwork Reduction Act, by the United States Government, in 1980 (United States, 1980). The Act encouraged a rethinking of the handling of increasing amounts of paperwork and information accumulated and gave Information Management a prominent position within this process. However, since then a lot of debate has emerged as to what Information Management actually means and entails. Ranging from perspectives such as Library Science, Information Systems, Information Science, Organization, Business and Economics etc. many scholars and practitioners have sought to achieve an understanding of Information Management.

The objective of my thesis is to seek an understanding of Information Management as a concept and the components that make up its meaning creation. The desired outcome of my thesis is not to provide an overall definition of Information Management but to create

an investigation of what factors influence the meaning creation and how these are formed and impact current use of the concept. It is my hope, that this can enable an understanding of Information Management that can be used by both scholars and practitioners within the field in terms of current and future meaning creation.

In order, to develop my research area, a review of some of the existing literature on Information Management will be carried out. The literature review will aid in outlining perspectives on existing approaches to meaning creation that have dominated the Information Management field and there through aid in my creation of a research area and question development.

1.1 Literature Review

Through the 30 years of history that the Information Management concept has now seen, many attempts have been made in relation to identifying the management and handling implications tied to information (Macevičiūtė & Wilson, 2005). However, a trend within the Information Management literature is leaning towards a notion where the more that is written, the more confusion is actually emerging concerning the concept. According to Galliers (1995), the many different inputs, from computer science, strategic management and organizational behavior have led to Information Management as a field being undermined. Galliers (1995), therefore calls for a creation of a strong basis for the information management field. In Information Management literature the approaches to establishing this basis and meaning of the concept are plentiful and in order to create an overview of these some of the main trends will be reviewed in the following.

One of the main approaches, can be found among scholars providing an examination of the research field for Information Management. This has been investigated by scholars such as Nowé (2005), Schlögl (2005) and Macevičiūtė and Wilson (2005). Both Schlögl (2005) and Macevičiūtė and Wilson (2005) make use of a method of grouping together the published articles within the Information Management Research field according to references and academic areas. Schlögl's (2005) findings, center round the missing field of Information Management within his categorization, as no one of the texts fall within this field according to his research. In line with this the analysis of references found in Information Management literature which Macevičiūtė and Wilson (2005) conduct also

present a loss of Information Management's profile through the dispersion across different academic fields. The discoveries from these authors are supporting some of the concerns put forward by Galliers (1995), about the fading field for Information Management. This viewpoint is to some extent countered by Nowé (2005), who describes how one can refer to an Information Community that embody the cross-disciplinary elements of Information Management. Nowé (2005) further notes how two main categories of practice and research exist within the field and how the difference between these are crucial to acknowledge. The approach, to the identification of Information Management is further elaborated by Nowé (2005) in her consideration of the research paradigm which is undertaken within research and how this must move from a 'rational choice' towards an 'institutional approach'. Within the institutional approach the focus is on actions and systems that drive behavior rather than on giving one answer (Nowé, 2005).

In the literature, scholars (Middelton, 2007; Phillips, 1999; MacKenzie, 1999; Davenport & Cronin, 1988; Daft & MacIntosh, 1978) have adopted this notion of actions and systems in the perspective of the creation of an Information Management field and concept through the focus on tools and approaches. In early literature, the focus on the management of information is found within texts by Daft and MacIntosh (1978) and Rhind (1968), underlining how the creation of technical tools to facilitate the existing management sharing is underway and will become dominant. However, Daft and MacIntosh (1978) note that the creation of systems that can do it all, is utopian, and that managers and organizations adopting technical solutions should not expect technology to solve all of their problems. The use of technology is also apparent in Phillips (1999) text on databases and how these can aid Information Management work through the facilitation of the right information at the right time. This view, is contested by Jones (1977) as he notes how the need for a common language for document use is more important as otherwise the database functions will not be able to respond to the users requests. The introduction of Rowley's (1998) framework for Information Management presents a structured approach to Information Management as consisting of levels of information environment, -context, -systems, and -retrieval. The test of Rowley's (1998) framework performed by Middelton (2007) indicates how the information systems and retrieval procedures seem to be at the core of the Information Management practices and thus should be subjected to more research and development. A unanimous factor, that ranges through the mentioned scholars work within tools and approaches to Information Management is the focus in the

strategic power that the proper use of the tools can give an organization or an individual. This is further supported by Davenport and Cronin's (1988) notion about how competitive advantage is apparent within a strategic character added to Information Management.

Exactly this strategic notion, is very related to the many texts within the Information Management field investigating the challenges and opportunities that the concept gives. Wormell (1989) describes how Strategic Information Management is at the final stage of what she terms the evolution of Information Management and how it enables an opportunity for increased competitiveness. A slightly different perspective, to the strategic use of Information Management is found in Kirk's (2005) notion about how a link between the way an organization defines information and that the Information Management application must be established in order for it to be of value. This awareness, of the existing information perception is also found in the earlier text from Phillips (1999) on how the new opportunities created by computer technology makes for a consideration of the digital files that hold information increasingly more important. Further, Phillips (1999) notes how methods of indexing, hardware and software alignment and understanding of the technology must be included in Information Management practices. In recent literature, authors such as Fallis and Withcomb (2009) introduce the notion of information philosophy to help understand how Information Management should be approached in order to facilitate efficient decision-making within organizations. However, Lehman (1993) creates a basis for how the application of Information Management tools must be supported by development of core competences and what he describes as learning alliances in order for new business models centered around information to be created.

The approach of educating for Information Management is one that also figures prominently within the Information Management literature. Scholars, such as Wilson (1989) and Lewis and Martin (1989) deal with the creation of a curriculum for education within Information management that should facilitate the rise of qualified professionals within the field. The distinct character of this role is commented on by Jackson (1987) in terms of how the skills that reside within an information manager should be found through the combination of systems analyst skills and an understanding for the technological communication abilities that exist. This view, is developed further in the text on roles in the e-landscape by Abell, Chapman, Phillips, Stewart and Ward (2006) where the authors opt for an increasing understanding among e-information professionals in regards to how

to deliver information specialized for certain applications within communities. Common for the authors, within this area of information manager professionals literature is the emphasis on the importance of capable information management practitioners to lead both technology and individuals who engage with it.

The literature surrounding Information Management shows a wide dispersion in approaches to defining and explaining the field. However, the recurring emersion of the topic of Information Management is linked by Websters (2002) outline of how the information society has evolved in many different directions in terms of technological, economic, occupational, spatial and cultural factors and how Information Management as a field seeks to cover them all. This is supported by Stonier's (in Webster, 2002) notion of how within the notion of an information society the one thing that cannot be suppressed is the existence of information. Best (1996) has also emphasized this view in his book on information and its management where he notes how the 'data explosion' becomes information shortage and Information Management procedures are needed in order to extract the relevant information.

All the attention surrounding information and Information Management has lead to the establishment of the relevance of the field. However, scholars (Galliers, 1995; Maceviciute & Wilson, 2002; Schlögl, 2005) are still requiring that more attention be paid as to the mechanisms that help drive the concept of Information Management on a research and practices base. Black (2005) notes how every discipline must have a history in order for it to exist. Thus, with thirty years of published research within the field of Information Management the need is becoming increasingly greater for the establishment of what surrounds the development of the Information Management concept.

1.2 Motivation

In relation, to the implications outlined in the Information Management literature, my area of interest sprung out of the varying approaches to meaning creation discovered, such as: research on information management as a field, the actions and systems that are at work, the strategic use of the concept, and the educational implications. Further, it seems that the more scholars contribute to the field, the more the understanding of it becomes diverse and in line with Galliers (1995) point of how the field is being overtaken by other areas. I

came to wonder if it could be possible to establish some common ground for Information Management scholars.

In line, with Black's (2005) notion about the importance of a history in the creation of a discipline my interest was ignited in terms of how this history could look for Information Management. Although, Black (2005) emphasizes the practical history, I have become intrigued by the research history that is found within Information Management, as I, from the literature review, have observed perhaps some common reference points and understandings can be found.

1.3 Problem field

The many entrances to the discovery of what Information Management means and entails outlined above imply that this task might not be an easy one as authors writing about Information Management appear to have many different viewpoints and takes on the concept. However, the literature review does provide some indications as to recurring concepts and perspectives on Information Management as a concept and field. I further, believe that the ambiguity of the literature might be related to how the concept of Information Management is very context based that it can be difficult to present a certain definition or application of the concept. My interest, therefore, is within the investigation of how the concept of Information Management is created in different contexts and which mechanisms are at work in the process of creating meaning of the concept.

Thus, with these notions in mind the problem field that has emerged is one dealing with creating and understanding of the components that make up information management in different contexts in a historical timeline. On the basis of this, my master thesis will seek to tackle the creation of meaning of Information Management through an investigation of two main areas:

1) the identification of the constructive parts that have made up understanding of Information Management as a concept throughout its academic history and;

2) the link which these constructive elements can have to practical use of Information Management.

1.4 Research Question

From the outline, of the Information Management literature review and the problem field described above it is now possible to formulate an overall research question for my thesis,

What meaning of Information Management can be created according to the constructs of academic Information Management discourses from 1970-2010, and which links can be established between the constructs and their reflection within current practical discourses of Information Management?

The research question, above introduces a number of different terms, such as *constructs, academic discourses,* and *current practical discourses*, that must be defined in order to create an understanding of the research question (Rasmussen, Østergaard, & Beckmann, 2006)

Within my research, the word *constructs* is drawn from the constructivist world perspective and describe components that make up the creation of meaning within a given world.
My inclusion, of *academic discourses* refers to written texts by academic scholars from universities and academic institutions from around the world.
The *current practical discourses* are related to discourses surrounding information management carried out by professionals that work with it on a practical level in the time of 2011.
In the outline of the research question the concept of Information management is also introduced. However, since the objective of my research is to seek an understanding of the Information Management concept it will not be explained here as this will be part of the outcome of this paper.

Thus, the objective of my research question is to investigate the identification of possible Information Management creation components that can be drawn from written texts from various scholars written from 1970-2010, and further to investigate if the identified constructs are related to the way that Information Management is reflected upon by current practitioners of Information Management in the year 2011.

1.5 Instructions for reading

My thesis, is divided into 6 main chapters. In the first chapter, I gave an introduction outlining the underlying thoughts and perspectives creating the basis for my research area and question development. The second chapter, will provide an overview and explanation of my choice of methodological framework as well as research design and analysis methods. In the third chapter, I will carry out my analysis of the constructive elements related to Information Management. This chapter, will be divided chronologically into three parts according to the analysis of the academic texts with the time periods of 1970-1989, 1990-1999 and 2000-2010. Within each of the analysis sections, a part conclusion will be made to sum up the findings from the individual time periods. Finally, this chapter will conclude with the proposition of eight constructs for Information Management drawn from the results found within the analysis. The fourth chapter, is dedicated to a discussion of the identified Information Management constructs reflection within current practical discourses of Information Management. Here a conclusion will be made, illustrating the relationship between the identified constructs, their theoretical meaning and their practical link. My findings from chapter 3 and 4, will then be combined in the fifth chapter where I will present the main conclusion and the effect of my research on the construction of Information Management. Finally, my last chapter, is dedicated to the notion of future perspectives of research within my discovered constructs as well as possibilities of establishment of common grounds for Information Management in the future.

2. METHOD

This section, outlines the overall methodological considerations underlying my research. I wish to make use of this section to outline the methods for investigation the research question presented above through the generation of relevant sub-questions to guide my research. Considerations regarding research perspective, analysis method, choice of data as well as the relationship between theory, data and practice, and the limitations made will also be presented and discussed.

2.1 Methodology

The overall scientific methodology, that I have chosen to adopt for my thesis is centered round the constructivist perspective and the use of discourse analysis.

2.1.1 Constructivist perspective

In my thesis, a constructivist approach will be taken to the research and analysis. This perspective, is chosen on the basis of the overall objective, that relates to the outline of the construction of the concept of Information Management throughout academic discourses from different time periods. Gergen (2009) describes, how the constructivist view allows for a perspective on the world as a place where ongoing constructions of meaning are taking place dependent on the relationships and contexts that surround them. The unpredictability, that is found within the constructivist perspective further supports my research as I will seek to distance myself from the 'taken-for-granted' (Gergen, 2009) presumptions of Information Management and approach the investigation from the perspective of the individual discourses under analysis. I do, however, recognize the notion made by Gergen (2009) on how constructions of the world often are based on the traditions and cultural influence that already exist and acknowledge that the influence of social and contextual input on the construction of Information Management as a concept is a relevant factor. However, I will attempt to let the construction guide the analysis rather than the pre-determined notions of what Information Management is. I thus, refrain from the establishment of a one ontological reality of Information Management and rather opt for the existence of a constructive reality for Information Management, in my research (Gergen, 2009).

The constructivist perspective, guiding my research is highly linked to what Collin (2003) describes as Cognitive Theoretic Constructivism (erkendelsesteoretisk perpsektiv) where the general belief is that our knowledge about reality is a construction that is influenced by surrounding circumstances and viewpoints. Within this view, the concepts that individuals make use of to understand reality are described as human created models that is applied to the world in order to make sense of and handle reality, however they are not exact pictures of reality in themselves (Collin, 2003). Thus, for my research this perspective allows for the recognition of creation of different concepts, models and notions that can make up Information Management as a concept within the individual discourses under investigation. In line with the constructivist view of the world, I have chosen to include discourse analysis to aid in my investigation of my overall research question.

2.1.2 Discourse analysis perspective

The perspective, taken on discourse analysis in my research is based on the objective of seeking an understanding of how the concept of Information Management arises through different discourses. The objective then goes beyond the traditional perspective of discourse as ’language in use’ (Van Dijk, 1998) and come to focus on the way that discursive practices form objects and subjects (Foucault, 1970). The historic grounding of Foucault’s (Howard, 2000) genealogical perspective allows for investigation of the way in which history has influence on a concepts development and how meaning creation of a concept throughout history has influence on the present creation of meaning for that concept. Foucault (1970) maintains that discourse is dependent on social context within which it is constructed to such a degree that discourses are viewed as both shaped by practices as well as shaping them. Foucault (1970) further presents that discourse can be viewed as practices that systematically form the objects of which we speak. The notions, from Foucault (1970), then allow for a perspective on the notion of concept creation that can include both historically documented investigations of the creation of Information Management as a concept as well as the recognition of the relationship between the way that discourses are shaped by the world as well as shaping the world (Paltridge, 2006). Had I, wanted to investigate the way in which political discourses shape the construction of information management, Fairclough’s notion of critical discourse analysis could have been useful (Howard, 2000) and had I wanted to investigate the construction of sentences within Information Management then the perspective of discourse as pure ’language in

use' (Van Dijk, 1998) could have been helpful. However, given the objective of this thesis my approach to discourse analysis will be formed on the basis of Foucault's (1970) discourse perspective as well as the constructivist viewpoint presented above. In order to elaborate further on the use of discourses analysis, considerations will now be made as to which analysis factors are relevant for my research.

According to Van Dijk (1998), a division can be made between a pragmatic view of discourse analysis where the objective is to focus on the meanings which are uttered in the discourse and a semantic view of discourse analysis where structure of the meanings of a whole clause or sentence is under investigation.
The semantic discourse analysis, relates to my objective of the analysis of the relations between sentences that constitute the conceptual meaning of Information Management within certain discourses (Van Dijk, 1998). Åkerstrøm (2010) describes the semantic analysis as historical analysis, which makes use of the developments from history to construct the present conceptual standpoint, which relates well to my research's relation to the Foucaultian (1970) discourse perspective described above.

In the semantic approach, the concept of meaning can refer to what Van Dijk (1998) describes as 'semantic representations', which describe the abstract conceptual meanings of words, sentences, sequences of sentences and whole discourses. Further, the discourse semantics approach relates these representations according to the relations between them within a discourse in order to investigate their coherence (Van Dijk, 1998). Especially, this coherence is interesting in relation to the creation of my use of discourse analysis as the investigation of the construction of the concept of Information Management is what I wish to achieve. The notion of coherence, can be studied on both a micro level, where the investigation focuses on the sentences immediately following each other and on a macro level where it is the meaning of the discourse as a whole that is under investigation (Van Dijk, 1998). For my research, the macro level of the discourses is especially interesting as this enables recognition of different themes of the discourses surrounding Information Management as well as include investigation of how the thematic management is carried out (Tomlin, Forrest, Pu, & Kim, 1998).

The investigation of the thematic notions allow for a recognition of the importance of the referents or starting points which the participants of a discourse have and what effects this

has on the meaning derived from the discourse (Tomlin, Forrest, Pu, & Kim, 1998). It is within this notion of thematic management that the necessity for identifying certain concepts and prepositions that are important, or seem more central to the development and evolvement of the discourse than others, are found (Tomlin, Forrest, Pu, & Kim, 1998). This recognition, can allow me to identify what are key themes or drivers for Information Management discourses and how these come to be central in the meaning creation.

Åkerstrøm (2010) relates the notion of meaning creation within semantics to that of the creation and of a concept. To create this connection Åkerstrøm (2010) makes use of Luhmann's (Åkerstøm, 1999) notion that semantics consist of condensed and repeatable variations of meaning that are available within the conversation of the discourse. On the basis of this Åkerstrøm (2010) defines a concept as, ”a condensation and generalization of a multiplicity of meaning and expectations” (2010, p. 165) In relation, to my research the link between the thematic management recognition and the creation of concept on the basis of a generalization of meanings and expectations can allow for an investigation of how the generalizations of potential themes within Information Management discourses affect the creation of the concept of Information Management.

At the center, of discourse analysis is the notion of what type of discourse is in focus. Van Dijk (1998) explains how the most studied form of discourse is the spoken use of language where the conversation and interaction between the participants are at the heart of the analysis. However, Van Dijk (1998) notes that written discourses can be viewed as powerful discourses as they share similar characteristics as the spoken but often appeal to a more diverse audience making the notion of meaning and interpretation of the text less obvious.

A notion, related to the interpretation of discourses from different perspectives is that made by Lemke (1992) who argue that all texts whether they are written or spoken create their meaning on the basis of other texts or conversations that have been made on other occasions. For my analysis, this notion of intertextuality is very interesting as the field of Information Management research consists of input from scholars with many different backgrounds (Schlögl, 2005). Thus, in order to investigate the discourses surrounding the creation of the concept of Information Management the type of discourse that is being scrutinized must be identified as well as its intertextuality with other texts (Lemke, 1992).

In relation to intertextuality creation, Andersen (1999) further notes how it is important to gather an overview of which context and world discourses take place in. This is also in line with the Foucaultian (1970) perspective presented earlier. Therefore, I will seek to establish an overall context for the discourses analyzed through a macro level introduction of the situation of the world based on main historical events or trends within the time given in the overall research question ranging from 1970-2010. As the time period, stretches over forty years some challenges occur, in terms of giving the macro level outline of the context, thus I have chosen to it into three minor time periods: 1970-1989, 1990-1999 and 2000-2010.

From the outline, of the methodological considerations and approaches to my research, I am able to formulate a sub question which can help guide my research surrounding the identification of the constructs that make up the discourses of information management,

What are the characteristic constructs of academic discourses surrounding the creation of Information Management in 1970-1989, 1990-1999, 2000-2010?

From the creation, of this question, the method for analysis and research design for it can now be created.

2.2 Method for identification of characteristic constructs within Information Management discourses

The method, created for the research within the frame of the first sub question consists of the creation of a discourse analysis approach and research design for choice of primary academic texts.

2.2.1 Discourse analysis approach

On the basis of my outline of the implications relating to both the constructionist view and the perspective on discourse analysis, I have created a step based approach for my discourse analysis approach that will function as a guide in my investigation of the first sub-question dealing with Information Management constructs. The constructive elements be identified through the analysis of the following three steps:

Step 1. *Intertextuality – Main Themes and Topics:*
The establishment of intertextuality is based in the references and background in which the authors positions him/her/them – selves (Van Dijk, 1998). Therefore, this section of analysis takes its point of departure in analyzing the references that the discourse is build upon. The overview of the intertextuality will enable the identification of themes and topics within the references and highlighted topics of the discourse. This step, is designed to create an overview of the elements and background that make up the discourse in line with the notions of the context influence explained in the methodological outline.

Step 2*.Generalization and meaning – creation of concepts*:
This part of the analysis, focuses on identifying the concepts that are formed from the different authors generalization and meaning creation within the themes of the individual discourses (Åkerstrøm, 2010). The identification of the main generalization and the concepts created are investigated on order to create understanding of the constructed components that function as meaning creating tools within the discourse in line with the cognitive theoretical perspective on constructionism (Collin, 2003).

Step 3*. Semantic relation to the meaning of Information Management*:
On the basis of Luhman's (Åkerstøm, 1999), notion of how semantic relations can outline the meaning that surrounds and defines concepts and ideas, this part of the analysis will draw on the identified intertextuality, themes and concepts and investigate which impact this has on the understanding of the concept of Information Management in the given discourse. Through this, an understanding of the constructive elements added to the concept of Information Management will be outlined in order to aid the creation of an overview of the overall meaning.

2.2.2 Method of data gathering

In line, with the constructivist perspective on research, I have chosen a qualitative approach to my selection of data for the first sub question by including a selection of primary academic texts which will be chosen for the analysis of the discourses surrounding Information Management (Bryman & Bell, 2003). I thus, refrain from using quantitative methods for generating statistics and overall generalizations (Bryman & Bell,

2003) as these fall outside my methodological background. Further, the limited text selection allows me to investigate the constructs of the Information Management discourses in a more detailed perspective that will aid in the identification, not only of the constructs, but also how they are linked together.

For the selection, of texts for analysis, the methods applied in content analysis (Bryman & Bell, 2003) are used as a starting point. In content analysis, the main objective is to quantify content through established categories carried out in a systematic manner (Berelson, 1952). Content analysis often aims at scrutinizing documents that describe a given situation or event from an outside perspective (Bryman & Bell, 2003). Had I thus wanted to investigate the way that mass media had affected Information Management at a given time, such as Bettman and Weitz (1983) in their study of stakeholder letters in relation to economic crisis, the use of content analysis as the prime method would have been preferred. However, given that my main objective is to analyze the development of Information Management as a concept from a research perspective, my use of content analysis will be limited to serving as a guide to how the texts for my discourse analysis are chosen. The notions, drawn from content analysis in terms of *sample type, sample dates, significant actors and words* (Bryman & Bell, 2003) are used as a starting point for creating my criteria for choice of texts.

Firstly, the notion of sample **type** establishes how considerations must be made in relation to which samples of texts are to be analyzed (Bryman & Bell, 2003). My research, takes inspiration from Schlögl's (2005) use of academic texts as the basis for outlining the field of Information Management. Drawing from this, academic texts will serve as the primary sample type for my analysis (Berelson, 1952). However, the samples may vary in accordance to the academic disciplines from which they have their origin through the inclusion of academic texts from different academic journals (Barley, Meyer, & Gash, 1983). From this, the first criteria for the choice of texts can be formulated:

Criteria 1: *The sample of texts chosen must be academic and may come from different academic perspectives.*

Secondly, the **dates** of the sample become important for my research in relation to the method of discourse analysis chosen (Foucault, 1970). The focus, of my analysis on the

development of the constructs of Information Management over a timely period, allow for the analysis to include considerations of the influence of time on the concept development. More specifically the early occurrence of Information Management concept term in the 1970's (Marchand D. A., 1978) will be taken as the starting point. The second criterion is therefore:

Criteria 2: *The texts chosen must be samples that are dispersed over different dates ranging from 1970 to 2010.*

Thirdly, the influence of **significant actors** is to be taken into account in relation to the choice of texts. Within this criterion, it is not the writers that are in focus but to a higher extent the quantity of quotations of the texts by other writers (Bryman & Bell, 2003). The aim, is to discover what texts have had a prominent position within the academic literature in relation to Information Management. The third criteria created is thus:

Criteria 3: *The texts chosen must be among the most quoted by other scholars within their (and other) fields, relating to Information Management.*

Finally, the notion of **words** in the content analysis has to do with the simple recognition of the same words within different samples (Bryman & Bell, 2003). The choice of texts for my analysis is dependent on the existence of words, 'Information Management' and 'Information'. The fourth, and final, criteria is then:

Criteria 4: *The texts chosen must have the highest occurrence of the words 'Information Management' and 'Information'.*

The four criteria, outlined above are applied to my text selection by allowing the two first criteria of **type** and **dates** to be the determining factors for the initial rough list of academic texts (appendix 1). This list is created on the basis of literature searches carried out at the online portals: Business Source Complete (2011), Science Direct (2011), Web of Knowledge (2011) as well as through the library at Copenhagen Business School. In addition, I received input from an Information Management professor at Copenhagen Business School (Madsen, 2011). The texts, were then arranged after their chronological

origin and divided into the three main groups, 1970-1989, 1990-1999 and 2000-2010 (appendix 1).

From the list of texts (appendix 2, 5 & 8) the choice of 15 texts for analysis was made by use of the two last criteria of **significant actors** and **words** in identifying 5 key texts within each of the time periods. The criteria were used as variables for formulas to determine the highest ranked text within the significant actor value, $\mathbf{V_1}$, and words value, $\mathbf{V_2}$.

In order to determine $\mathbf{V_1}$ the online service Web of Knowledge (Reuters, 2011) was used as it allows for the search of numbers of citations of the given text. The number of references then served as a variable, in this paper termed as *'SA'*. On the basis of this, the simple formula for $\mathbf{V_1}$ is,

$$V_1 = SA$$

The ranking of the texts according to this value is outlined in appendix 3A, 6A and 9A.

The next value, $\mathbf{V_2}$, was determined by the number of occurrences of the words 'Information Management' *(IM)* and 'Information' *(I)* in the texts. However, given that this paper focuses on the discourses surrounding Information Management the occurrence of these words are multiplied by two. Further, the occurrence of the words have been calculated as a percentage out of the whole number of words *(OW)* in a given text, in order to allow texts of different lengths to be considered equally.

The outline of the variables amounts to the creation of a formula for $\mathbf{V_2}$,

$$V_2 = \left(\left(\frac{(2 * IM)}{OW}\right) * 100\right) + \left(\left(\frac{I}{OW}\right) * 100\right)$$

The ranking of the texts according to this value can be found in appendix 3B, 6B and 9B, the texts with the highest number of words placed first.

Due to the difference in ranking of the texts on the basis of $\mathbf{V_1}$ and $\mathbf{V_2}$ a simple approach was taken ranking each of the text with a value starting from 1 in accordance with their

placement within the ranking system. Following this, the two values given (Rank V1 and Rank V2) to the texts for both $\mathbf{V_1}$ and $\mathbf{V_2}$ where then added to each other in order to give each of the text their cumulative value. The chosen 5 texts within each time period where then those that had the lowest numbers as this indicated a high $\mathbf{V_1}$ and $\mathbf{V_2}$ (appendix 4, 7, & 10)

2.2.3 Intended outcome drawn from method for identification of characteristic Information Management constructs

The outline, of the method for the construct identification within the discourses for Information Management is aimed at providing an overview of characteristic constructs for Information Management. In relation, to the overall research question it is therefore possible to draw a second sub-question to guide research with the constructs link to practical discourses

Which reflection of the identified Information Management constructs can be found in the development of current practical discourses of Information Management?

2.3 Method for discussion of reflection of Information Management constructs in practical discourses for Information Management

The method developed, follows the notion outlined by Åkerstrøm (1999) on how the way in which concepts are perceived in the past can influence the way that they are thought of in the future. Therefore, the objective with the method design is to make use of the findings from sub question one to investigate the influence on current practical discourses of Information Management.

2.3.1 Co-reflective analysis

Gergen (2009) highlights a special form of coordination mechanism within constructivism related to the way in which views or opinions can be located in discourses through co-reflection (2009, p. 193). The idea, behind co-reflection is to search for the location of constructs within a discourse that reflect upon certain given statements. As an example, Gergen (2009) uses the idea of a spoken discourse between two people where the first one utters a concern for increased global warming and the respondent asks what the weather is

like today. In this example the respondent fails to reflect on the input given. This notion, of co-reflection will be used in my analysis where the main objective will be to investigate how the identified constructs from sub-question one are located and reflected upon within the chosen practical discourses.

2.3.2 Selection of practical discourses

The practical discourses selected will, as in the method for choice of academic text, focus on few examples rather than overall statistics (Gergen, 2009). My choice, of discourse is therefore based in the written communication of mission, vision, methods and purpose, drawn from two companies working with Information Management. The two companies, chosen are selected based on their diverse profiles, one is a Danish information management consultancy company, Platon (for profile see appendix 11), and the other a business information management department at a global company providing consultancy within technology and outsourcing, Capgemini (for profile see appendix 12).

The choice of companies, have been influenced by the accessibility of information about their Information Management initiative. It is not, my objective to conduct a full analysis of the individual companies but rather to make use of the discourses to investigate the different practical perspectives on Information Management in relation to the created Information Management constructs.

2.4 Model of the link between methodology, method, the overall research question and the two sub-questions

The outline, of the implications drawn from the methodological choices and the methods chosen as approaches to answering the two sub-questions created can be summarized through the creation of a model illustrating the relationship between the different components. The model is outlined below:

<table>
<tr><td colspan="4">RESEARCH QUESTION
What meaning of Information Management can be created according to the constructs of academic Information Management discourses from 1970-2010, and which links can be established between the constructs and their reflection within current practical discourses of Information Management?</td></tr>
<tr><td>SCIENTIFIC METHODOLOGY</td><td>ANALYTIC PERSPECTIVE</td><td>APPROACH TO ANALYSIS</td><td>DATA GATHERING</td></tr>
<tr><td rowspan="5">Constructivist
• The world is created of phenomena that are constructed through the attachment to something.
• The concepts that we make use of to understand reality are described as human created models.
• Meaning of the world is drawn from the surrounding context as well as existing ideas.
• ‘Taken-for-granted’ notions are discarded.</td><td rowspan="5">Discourse analysis
• Discourses are shaped by history
• Discourses are context dependent
• Discourses can aid in providing concept sematics
• Discourse analysis does not provide a single answer</td><td colspan="2">1st sub-question:
What are the characteristic constructs of academic discourses surrounding the creation of Information Management in 1970-1989, 1990-1999, 2000-2010?</td></tr>
<tr><td>Discourse analysis steps:

1. Intertextuality
2. Generalization and meaning – creation of concepts
3. Semantic relation to meaning of Information Management</td><td>Academic texts:

• 15 academic texts: 5 texts within each time period: 1970-1989, 1990-1990, and 2000-2010
• Texts chosen on the basis of type, date, words, and significant actor.</td></tr>
<tr><td colspan="2">2nd sub-question:
Which reflection of the identified Information Management constructs can be found in the development of current practical discourses of Information Management?</td></tr>
<tr><td>Construct analysis:

Co-reflecive analysis of the constructs in relation to practical discourses</td><td>Practical Discourses:

Statements on vision, mission and purpose from two companies dealing with Information Management: Platon and Capgemini</td></tr>
</table>

Model 1: Model of relation between methodology, method, overall research question, and the two sub-questions.

Through the outline of this model the link between the different method elements provide a guide for how the analysis and discussion of my thesis should be carried out as well as their ability to answer the overall research question of my thesis.

2.5 Relationship between theory, data and practice

The outline, of the methods applied in my thesis create some implications concerning the relationship between theory, data and practice.

In accordance, to the constructivist perspective (Collin, 2003), my thesis views theory as a constructed enabler that can aid in the understanding of reality. Thus, theory is created by people that seek to create knowledge concerning certain phenomena within the world, and not about the world itself. The use of discourse analysis is therefore thought of as a method for seeking and understanding of Information Management as a concept within a world and not about seeking an understanding of the world in which this concept exists.

The effect, of this view relates to the way in which the collected data is regarded, within this thesis, as a dynamic variable which cannot enable an ultimate description but can provide a 'snap-shot' of a current situation. However, it is my belief that for the provision of constructive elements for given discourses surrounding Information Management, my chosen data can be used in order to create an understanding of the possible meaning of Information Management.

The dynamic nature, I have put forward in regard to theory and data also transcend the view of practice. Practice is viewed, in my research, as something that is influenced by theory but also, in turn, influences theory. This relationship is draw from the constructivist perspective that surrounds my research as the practical meaning creation is viewed here as created through the application of constructed models (Collin, 2003). However, the meaning that is created is formed in regards to the Foucaultian (1966) perspective of how the certain practical life and understanding of things are those that influence the creation of meaning. Therefore, the analysis of the discourses will be carried out with awareness concerning the timely reality that the chosen academic texts are situated in, as it appears that theory and reality cannot be detached from each other.

2.6 Delimitations

In my thesis, a number of limitations exist to the research carried out. The first limitation, is made in relation to the use of discourse analysis. The objective, of this use is not to provide a full discussion of the discourse analysis implications, history, views and perspectives, but to make use of discourse analysis as a tool in the investigation of what drives creation of the concept of information management. Neither is it the objective of the created discourse analysis method to be thought of as a new method of discourse analysis but more to function as a guide for my analysis for identifying the constructs that make up concept creation.

Secondly, the choice of academic texts for analysis are limited to include the top five texts within each time period based on my created selection criteria. This, limitation has been made to stay within the scope of the constructivist perspective as well as to create an analysis that enable me to go in depth with exploiting the texts rather than create a statistical overview. It is my belief, that the results that are generated through my method can allow for a more comprehensive picture of Information Management, as it can be argued, that the diversity and context dependency of the field makes it hard to establish set measurement methods or classifications.

The inclusion, of the time perspective within the introduction of each of the analysis sections are created to seek meaning of the discourses from that time period and not to create complete descriptions of that time. They serve as a help to the understanding of the constructs for Information Management discovered through the analysis and it is, therefore, not the objective to provide complete and comprehensive descriptions of the time but mainly to provide an overview of certain trends, historical events and sociological implications.

Finally, some limitations are made in regards to the discussion carried out to investigate the second sub question concerning the link between the established constructs and current practical information management discourses. The discussion is limited to include discourses from two companies that are chosen as representatives for the practical application of information management. I recognize, the limitations of this choice, but believe that the two companies chosen provide an interesting starting point for the investigation of the links as well as represent valid insight to practical information management discourses.

3. ANALYSIS

For my analysis, I will make use of my created discourse analysis approach in order to investigate academic texts on Information Management, dispersed over time. This will be done to investigate the first sub-question regarding how the concept of Information Management is ascribed meaning over different timely contexts. The texts are divided into three main time groups, the first from 1970-1989 (appendix 4), the second, 1990-1999 (appendix 7) and the third, 200-2010 (appendix 10). Each of the three time period sections will include three main elements consisting of, an introduction to the time period in terms of societal and technical influences and events, analysis of each of the five selected texts according to my discourse analysis approach of *1)Intertextuality, 2)Generalization and meaning – creation of concepts*, and *3)Semantic relation to meaning of Information Management*, as well as a part conclusion summing up the findings of all the discourse analysis in relation to identification of main constructive elements.

3.1 Time period I: 1970 – 1989

According to Giddens (2007), the 1960s represented the 'Golden Age' of the social welfare as increased awareness of the social world became apparent. As a result of this, the 1970s and 1980s were highly influenced by the initiated social progressive values that where found in the western world in the 1960s (Giddens, 2009). The increase, in social awareness further meant that an increasing interaction between people from different societal classes began to become more evident through the late 1970s and the 1980s, leading with it a need for increased understanding for other peoples perspectives and values (Giddens, 2009). With this, also followed an interest in creating understanding of how people act and why.

The unsecure financial system, that dominated the early 1970s and resulted in the financial recession lead to the emergence of a rethinking of the inspirational figures of that time, moving away form the more economically conscious and high spending class society and towards more media-friendly 'New philosophers' that promoted a more liberal view of the world (Buchanan, 2006).

The introduction of the Paperwork Reduction Act in the United States of America in 1980 (United States, 1980) created a heightened awareness of the increasing burden of

paperwork and information to individuals and companies. Further, the act focused on creating the maximized use out of information through the insurance of, *'The Planning, budgeting, organizing, directing, training, promoting, controlling and other managerial activities involved with the creation, collection, use, and dissemination of information within the federal government'* (United States, 1980).

Advances, within the world of information technology, where also visible in the 1970's and 1980's where a lot of new technology became accessible for both companies and private users (Feraud, 2000). Feraud (2000) describes how this period of time was dominated by a high uncertainty in regards to how the cost and benefits of the new technology should be calculated. This left, the application developers a very free platform for their development of new applications since the rational became that no matter what the investment within IT cost it was outweighed by the benefits derived from it. The late 1980's where influenced be an increased interest in aligning the language of the IT specialists within organizations with that of the users of the computer technologies (Feraud, 2000). Focus, was put on identification of the processes in which IT could aid and how the most efficient use of the technology could be facilitated (Feraud, 2000).

Following the outline, of the time period 1970-1989 it becomes apparent that this time is one influenced by the emergence of a new world through the settlement with the existing social classes and new technological advances. Further, the increased understanding of peoples different values, cultures and backgrounds created a new view of the individual as an enabler and independent character. Finally, the Paperwork Reduction Act (United States, 1980) put information handling in focus.

3.1.1 Analysis of the selected texts

The following table provides an overview of the articles under investigation according to their timely dispersion and relation.

Author(s)	Title	Publication	Appendix
Marchand, D.A. (1978)	*Information Management in Public Organizations. Defining a New Resource Management Function*	The bureaucrat: the journal for public managers	4A
Power, D.J. (1983)	*The Impact of Information Management on the organization: Two Scenarios*	MIS Quarterly	4B
Trauth, E. (1984)	*Research-Oriented Perspective on Information Management*	Journal of Systems Management	4C
Best, D.P. (1988)	*The Future of Information Management*	International Journal of Information Management	4D
Lewis, D.A. & Martin, W.J. (1989)	*Information Management: State of the art in the United Kingdom*	Aslib Proceedings	4E

Table 1: Overview of the 5 selected texts within the time period from 1970-1989 (For full list see appendix 4)

Text 1. Information Management in Public Organizations: Defining a new resource management function (Marchand D. A., 1978)

Intertextuality – main topics and themes

In the first text, of this group, *Information Management in Public Organizations: Defining a new resource management function* (Marchand D. A., 1978) the analysis of the references, allow for a categorization of them according to different key themes. The first, is centered round the notion of an 'economic perspective on information as a resource' with references to authors such as McDonough (1977) and his book on Information Economics & Management Systems and to Horton's (1977) text about how you can budget for the handling of what he describes as the Data and Information Resource. Emphasis, is found in the references on the concept of 'Organization' which is viewed in different contexts through Thompson's (1967) view of how the organization performs in action. Wilensky's (1967) ties between the organizational intelligence and how the members of an organization can cling to existing representations making introduction of new processes or ideas difficult also highlights an organizational focus. The final prominent reoccurring theme found within the references is the focus put on 'Information Processing'. This theme, is highlighted with focus on Information processing in relation to statistical systems (Dunn, 1974), information systems administration (McFarland, Nolan,

& Norton, 1973) and the management of paperwork generated through communication and information (Bentley, 1976).
The intertextuality and background of this text can then be said to be highly influenced by a management perspective on the world through the focus discovered on economics and management and making organizations preform in action.

Generalization and meaning – generation of concepts

The first, main creation of meaning, that Marchand (1978) seeks to form is based on the themes 'Behavioral Regression' and 'Organizational Effectiveness'. These two themes are joined together through the illustration of the Information Management concept as divided into two dimensions (Marchand, 1978, p. 6, Fig. 1), 1. Managing the information process and 2. Managing the data resources. Through this outline, Marchand (1978) provides a construction of the concept of Information Management through the discourse as centered round the management of processes and influenced by the existing behaviors of an organization as well as a way of maintaining or achieving organizational effectiveness. Centrality, of this effectiveness construct, is highlighted through Marchand's (1978) emphasis on how, *'The basic purpose of Information Management is to promote organizational effectiveness'* (Marchand, 1978, p. 5).

Secondly, Marchand (1978) seeks to create meaning of Information Management as a concept through the generalization of constraints in relation to Information Management presented in the visual illustration (Marchand, 1978, p. 8, Fig. 2) that implies how Information Management have certain constraints. This outline is also related to what Åkerstrøm (1999) notion of how the creation of concepts can occur through the outlining of the counter concept. Thus, Marchand (1978) makes use of this by outlining the ways in which Information Management is limited and there though indicate in which areas it can be successful.

Semantic relation to the meaning of Information Management

Marchand (1978), adds to the semantics of Information Management through investigating the need for a viable concept of Information Management within the public sector (Marchand, 1978). The understanding created, highlights Information Management as a way of providing organizational effectiveness and how the concept builds on the management of information processing and management of data resources. Further,

Marchand (1978) adds to the semantics of Information Management by emphasizing the construct of coordination management of processes and products that are of value in relation to organizational decision-making (Marchand, 1978, p. 8).

Text 2. The Impact of Information Management on the organization: Two Scenarios (Power, 1983)

Intertextuality

The second text, reveals focus on some similar topics as Marchand (1978) however the focus areas within the topics differ from the first text in various ways. In the references, focus is found in the 'Organization' as a theme but a strong focus is connected to the interplay between organization and 'Decision-making' (Bass, 1983; Inbar, 1979). Further, a recurrent theme in the references for Power's (1983) discourse surrounding the impact of Information Management is that of 'Database'. The intertextuality, found here, deals with both how to understand 'Database' and 'Data Base' and how these two concepts interplay with each other (Lewis, 1977). In addition, the references underline the importance of data bases to businesses in online environments (Huhn, 1974) as well as put focus on the importance of databases as tools for the future (Nolan, 1973: Robinson, 1978b: Robinson, 1978a). The two themes, outlined here dealing with 'Decision- Making' and 'Data Bases' are tied together by the inclusion of the texts in the topic identified in the reference list of Power's (1983) article, that is the topic of 'Organization and Management Information Systems'. The references, are centered round the creation and control of information systems highlighted by focus on 'Planning and Control Systems' (Anthony, 1965), Management Information Systems (Davis, 1974) and Organizational context and MIS structure (Ein-Dor & Segev, 1982).

Generalization and meaning – generation of concepts

The use of scenarios for meaning creation, within the discourse, allows Power (1983) to create a generalization of a concept which he refers to as 'Information Management Variables' (Power, 1983, p. 15). The components influencing this concept deal with 'Data Administration', 'Database Management', 'Data Entry/Output' and 'System control'. In order, to add to the meaning of the variables the organizational scenarios are presented as extreme but plausible states for organizations (Power, 1983) to see which impact the state has on the Information Management initiatives and their effectiveness. The findings, from

this application introduce important constructs to the discourse of Information Management through the meaning created surrounding how the organizational attitude towards Information Management highly influence the time and resources spend on carrying Information Management out, with emphasis on how there is no right or wrong way (Power, 1983, p. 16). The generalization here, then does not recognize the application of advanced information systems and highly trained information professionals in all situations but rather exemplifies the context dependency of the situation.

Another concept, which is created from the generalization of the scenarios is the 'Possible Consequences' (Power, 1983, p. 18) of Information Management highlighting the contrasts of effects in relation to decision making responsibilities, and division of control on the strategic and operational level of an organization. In the discourse, the constructive elements that enable this meaning creation contrasts how an increased information flow in the scenario opting for traditional information handling methods such as pen and paper etc. might increase decision complexity. On the other hand, in the scenario opting for advanced systems it might enhance the collaborative effectiveness in decision-making (Power, 1983, p. 18). Again, a crucial meaning created here relate to the match between system complexity and organizational procedures.

Further, the meaning of the consequences are also generated through a focus on the need for facilitation of information sharing and the enabling of lower barriers internally due to a heightened information sharing (Power, 1983).

Semantic relation to the meaning of Information Management

The themes and concepts identified, add to the semantic relation to Information Management through the link between the concepts of 'Scenarios', 'Decision-making', 'Information Management Variables' and 'Consequences' as illustrations of what can be the effect of the application of Information Management within an organization (Power, 1983). Especially, meaning creation between the concepts is created in relation to the influence they have on decision-making throughout the organization.

The semantic relation, that is created to Information Management puts focus on creating an understanding of Information Management that has profound effect on the organization and the mechanisms that make the organization function (Power, 1983). Further, emphasis is put on how the consequences of this must be recognize and evaluated in order for Information Management to be successful. With the inclusion of the scenario theme, Power (1983) emphasizes that Information Management can assume different

characteristics according to organizational type and preference and that the different varieties should be respected as the application of Information Management must fit with the organizational objective.

Text 3.Research-Oriented perspective on Information Management (Trauth, 1984)

Intertextuality – main themes and topics

The third text, shifts in focus compared to the previous two as the intertextuality here is based on two main topics, 'Information Resource Management' and the 'Managers role'. This is apparent, through the references to Information Resource Management as the future way of organizing (Holmes, 1979). Emphasis, is also put on including references that deal with how top management will react to information resource management (Matlin, 1980) and how they can be prepared for corporate Information Management (Lucas, 1979).

Generalization and meaning – generation of concepts

Within Trauth's (1984) discourse the concept 'Information Resource Management' is presented through the creation of meaning in regards to tackling the emerging existence of information technology within organizations. In addition, Trauth (1984) adds to this by mentioning how 'Information Resource Management' can be seen as a response to the exceeding 'critical mass' level of information that top managers are facing. The combination of these two, the increased IT and the need to manage information, are bound together when Trauth (1984) includes considerations of Information Resource Management as included at the highest level of the organization. However, Trauth (1984) also notes that within this use a change in terminology must happen moving from the raw function of data processing towards the result-oriented Information Management.

The second concept, that Trauth (1984) introduces is a view of Information Resource Management as holistic, through creating meaning by allowing the concept to cut across departmental and divisional lines. The meaning created, is centered round the focus on how Information Resource Management does not remain with only one profession but stretches across many different professions ranging from librarians to programmers to analysts (Trauth, 1984, p. 14).

Further, meaning is constructed of Information Resource Management through the inclusion of considerations of how the notion of Information Management is likely to impose changes to an organization (Trauth, 1984). Meaning here, is formed through the notion that existing systems within the organization has not fulfilled the needs of the user community. Therefore, new initiatives and change must happen through the creation of an Information Management schema that recognize the processing of information activities.
The final concept, that Trauth (1984) creates meaning within is found under the implications for management theme, where emphasis on how information must be viewed as a vital corporate resource and how meaning of this notion must be facilitated through the creation of information policies.

Semantic relation to the understanding of Information Management

On the basis, of the main themes and the concepts identified, the relation between them indicate a meaning of Information Management as out-put oriented and a way to improve organizational effectiveness (Trauth, 1984). Further, the relation between the concepts introduced in the discourse is connected by Trauth's (1984) introduction of Information Resource Management as a holistic notion that includes many different disciplines. This is further, effected by the discussion of the role of information manager where Trauth (1984) emphasizes that the role of information manager can be filled by many people in an organization. However, a relation is created to the advantage of a person with technological knowledge as an understanding of the data processing systems is an advantage. But, further it is noted that the main function of the information manager should be centered round a corporate planning function and fulfilling a coordination and corporative effort between the departments of an organization (Trauth, 1984).

Text 4. The Future of Information Management (Best, 1988)

Intertextuality

The fourth text (Best, 1988), refers to the 'Information Manager' through references to texts dealing with Intelligence Management (White, 1985) and how the role of the information manager is evolving (Wiggins, 1985). In addition, a lot of consideration to the new world of Information Management becomes apparent in this articles intertextuality as it puts focus on Toffler's (1984) notions from his book The Third Wave on the third wave of industrialization that is driven by information. Further, this is emphasized by focus on

information as a resource (Horton, 1985) and by the inclusion of a report concerning the *state of the art* of Information Management (Griffits, 1987). The final theme, found in the references, deal with Information Management as Information Mapping (Best, 1985) and the organizational implications related to implementing Information Management (Varela & Maturana, 1976; Beer, 1980; Vickers, 1985).

Generalization and meaning – generation of concepts

In the discourse, the main concepts are found in the last section on 'the way ahead' (Best, 1988) where five key concepts are introduced that are to assist in the development of Information Management tools, these are, *'Performance level settings', 'Positive and negative feedback', 'Dynamic equilibrium', Bounded autonomy', and 'Self organization'* (Best, 1988, p. 18)

The composition of meanings into a concept for *performance level settings* is derived from an identification of the need to set targets for performance that match the expectation of the user (Best, 1988). Best (1988) further notes that targets must be set both for information and for information about information in terms of how well informed information professionals are about what is happening with information within the organization. Information Systems is added to the meaning creation as a possible tool for this organization however, Best (1988), emphasizes that information professional must set up the measurement systems.

In terms, of gathering *positive and negative feedback*, Best (1988), notes that this is important in regards to measuring the output of the system under observation both positive and negative and makes use of this to measure the effectiveness and over all performance of the information systems.

The meaning, of the *dynamic equilibrium* concept is created through notions of planning for capacity of information depending on the business structure (Best, 1988). Meaning is created using the economic function of equilibrium to seek to illustrate how balance must be established in relation to, on one side, the space needed for information to be shared, and, on the other side, the creation of the balance between what Best (1988) describes as discard and archive policies within the system.

The fourth concept, that is introduced, deals with *bounded autonomy*. The concept here is drawn from a generalization of meanings regarding how information systems can be viewed as 'black boxes' and how the autonomy of these 'black boxes' are often bounded and dependent on the context (Best, 1988). This problem has both a technical and

managerial dimension as the complexity in terms of storage and process. According to Best (1988), the objective with determining the autonomy of sections with regard to information is to figure out the 'commonality' of the information in order to limit 'cross-boundary' transactions.

Finally, the concept of self-organization is created, by Best (1988), through drawing on a theory from Varela and Maturana (1976) on how social and biological groups tend to organize themselves in ways that will ensure their survival. This notion is used as a basis for the creation of meaning that systems and departments within an organization will self-organize according to what enables them to survive.

Semantic relation to the understanding of Information Management

The five concepts, for development of information tools are linked together by Best (1988) in a conclusion where he notes that,

"*The way ahead for IM is therefore to develop techniques and tools in the areas of administrating and accounting for information which will allow general management to guide the use and development of information in the same way that they guide the use and development of other resources of the business"* (Best, 1988, p. 23)

Through this conclusion, Best (1988) puts further emphasis on how the discourse is based on the notion of management and with a business objective through the alignment of information with the rest of the resources of the company.

Further, Best (1988) puts focus on relating the concepts developed to the role of an 'information manager'. Best (1988) thus, takes a personalized approach to the practice of Information Management by developing a set of concepts that are for an information manager to consider when going about managing information. Within these are emphasis on how an information manager should focus on *'accessing document use and flow* as well as the *management of flow and stores'* (Best, 1988, p. 24).

Text 5. Information Management: state of the art in the United Kingdom (Lewis & Martin, 1989)

Intertextuality

In the fifth discourse, the intertextuality takes on a slightly different character than observed in the other texts. The text, shows a reference list that is more based on including perspectives on Information Management from both an literary view but also through

questionnaire references. The literature, deals with the overall theme of Information Management from a resource perspective (Levitan, 1982; Lyttle, 1988), from a strategic business perspective (Weitzel, 1987; Wiggins, 1986; Willis, 1987), and from an educational view (Anderton, 1986; Holland, 1988). A large part, of the discourse basis is further found in the questionnaires carried out at both companies from the Aslib association (the association for Information Management in the United Kingdom) and universities in the United Kingdom such as Henley University (Lewis & Martin, 1989).

Generalization and meaning – generation of concepts

In Lewis and Martin's (1989) discourse, meaning is created by coining together the discovered themes within two main perspectives.

The first perspective, has to do with the generalization made about the practice state of Information Management within the UK. In the creation of meaning, within the concept of what Lewis and Martin (1989) refer to as 'state of the art' on a practitioner level, the authors create three main points for consideration. Firstly, emphasis is put on the growing interest in Information Management from a strategic perspective and how it can add to the success of organizational goals. Secondly, they underline that the practitioner perspective still views Information Management as an interdisciplinary concept and that this increases the need for better marketing and explanation of Information Management in order to enable people to understand what it is all about. Finally, the authors (Lewis & Martin, 1989) note that there is a need for recognition and sponsorship for the field by what they deem a 'critical mass' of decision-makers. Linked to this point, is also the need for creation of a business education targeted towards Information Management (Lewis & Martin, 1989).

The second perspective, in which Lewis and Martin (1989) seek to create meaning is within the educational implications for Information Management. Within this perspective the authors (Lewis & Martin, 1989) put forward the generalization that there is a need for a new kind of practitioner, in the form of an information manager, to emerge in order to handle the challenges of the Information Age. The meaning, of this Information Management practitioner perspective it created by including more practitioner based learning in the school curriculum with a strong focus on strategic Information Management (Lewis & Martin, 1989). Further, Lewis and Martin (1989) do not assign the

Information Management practitioner to any one discipline but rather opens up the meaning of the role to be interdisciplinary in its nature.

Semantic relation to the understanding of Information Management

From the identification, of the practitioner and educational perspectives on Information Management and the role of the information manager which is created as concepts within Lewis and Martin's (1989) discourse, the semantic contribution to the Information Management field can be outlined. The implications for Information Management drawn from a practitioner view recognizes diversity, multidisciplinary and strategic value of the concept within a business context. However, what becomes especially interesting is the link from this perspective to the educational view as it is apparent that the educational suggestions are highly influenced by the practitioner angle to the Information Management field. So it is apparent that within this discourse the two perspectives are interlinked through the connection that Lewis and Martin (1989) makes through the presentation of the Information Manager role.

3.1.2 Information Management and the changing world of 1970-1989

The analysis, of the five text, provided some interesting perspectives to the construction of Information Management within the given time period of 1970-1989 in terms of the constructive elements that make up meaning creation surrounding the concept.

Firstly, the notion or organizational effectiveness plays an important role in the earliest discourses from Marchand (1978) and Power (1983). The object in focus is, to a large extent, the organization and how achieving effective coordination processes (Marchand, 1978) and decision-making (Power, 1983) are becoming more dependent on considerations of Information Management initiatives. According to the discourse model approach from Foucault (1970) the constructional components surrounding the creation of a concept can have ties to the world within which they exist. This relation can be seen in the historical societal changes that are brought on by the emergence of new IT coupled with an awareness of changes within the creation of societal structures. Such changes and alterations make apparent the need for rethinking the organizational processes in the discourses surrounding Information Management. Particularly in relation to achieving increased organizational effectiveness.

Secondly, a key construct in relation to the Information Management concept is found in the introduction of Information Resource Management by Trauth (1984). The link of the resource view of information to the organizations resource portfolios can be viewed as a reflection of the emphasis on information generated through the historical introduction of the Paperwork Reduction Act (United States, 1980). The construction of Information Resource Management is made with focus on how the resource perspective offers a holistic perspective to the concept of information. This puts Information Management at the center of a new meaning construction where emphasis is put on having a person, in the form of an information manager, take control of the handling of the information resource.

The final and main construct can be found in the need for the identification of future directions for Information Management found in the discourses by Best (1988) and Lewis and Martin (1989). The historical observation of emergence of IT advances found in Feraud's (2000) historical outline are visible here in the focus on the need for design of tools and techniques for Information Management to support different business functions. The future perspective, from Best (1988) also includes focus on how Information Management should aid in driving businesses forward through the utilization of the information resource. Key to this use, is the occurrence of an information manager to facilitate this process with special focus on flow and storage of the information. The information manager role is also in focus within Lewis and Martin's (1989) discourse on the relation between business practices and education within Information Management. Here emphasis is especially put on creating education for Information Management in order for it to be accepted as a strategic top priority within business (Lewis & Martin, 1989).

3.2 Time period II: 1990-1999

The fall of the Berlin wall in 1989, influenced the 1990s in various ways. One of these, are described by Boden (2007) who explains how the events of 1989 led with it a new revolutionary wave that was to a higher extend concerned with communication and a shared common variable in their focus on information technology and the effect of such media.

In line with this, further societal changes, brought on by the increasing globalization such as the liberalization of restrictions of foreign investment in the early 1990s (Giddens, 2009) and the emergence of the internet in 1995 created significant changes within the perspectives on the individual and on society.

The increased liberalization of markets, and the choice from many companies to outsource or move their manufacturing to other countries meant an growing connection to the emerging global society (Giddens, 2007). Through this, a change in the way individuals thought of work could also be recognized. According to Giddens (2009) sociology, employment became a current expression of ones ability to work rather than the dominant prescription of ones position within the work market. This meant, a shift in the way that social classes where no longer based on behavioral prerequisites but on what Giddens (2009) terms 'life-chances' for individuals. Thus, within the global world chances seemed to be liberated and given to all that had the desire and drive to work for it (Giddens, 2007).

The rise, of the 'fast-moving' character, of IT in the 1990 (Levy, Hafner, & Rogers, 2007) also had an impact on the way that people communicate and the ease of connecting across borders both professionally and personally. Further, the advances in IT, meant an increased demand for skilled workers within this area. Giddens (2007), notes how in 1995 two-thirds of the jobs generated where skilled and demanded some form of technical knowledge. Thus, with this Giddens (2007) describes how the society was moving towards being more controlled by a knowledge and service economy.

The outline, of the context of this time provide an overall picture of a world where the effects of globalization were making their marks in terms of the liberalization of markets and increased possibilities for the individual to excel themselves in terms of skill and ability. Further, the fast moving IT development created increasing opportunities for

cutting across national, professional and personal borders in terms of increased opportunities for communication.

3.2.1 Analysis of the selected texts, 1990-1999

The selected texts, for analysis within this area, are displayed below to show their occurring order and relation.

Author(s)	Title	Publication	Appendix
Karimi, J. & Konsynski, B.R. (1991)	*Globalization and Information Management Strategies*	Journal of Management Information	7A
Davenport, T.H (1994)	*Saving IT's Soul: Human – Centered Information Management*	Harvard Business Review	7B
Jarvenpaa, S. & Ives, B. (1994)	*The Global Network Organization of the Future: Information Management Opportunities and Challenges*	Journal of Management Information Systems	7C
Anand, V., Manz, C.C., Glick, W.H. (1998)	*An organizational memory approach to Information Management*	Academy of Management Review	7D
Rowley, J. (1998)	*Towards a framework for Information Management*	International Journal of Information Management	7E

Table 2: Overview of the 5 selected texts within the time period from 1990-1999 (For full list see appendix 7)

Text 1. Globalization and Information Management Strategies (Karimi & Konsynski, 1991)

Intertextuality and main Themes and Topics

The first main topic, that can be drawn from both the headline of the text and observing the references, is that of 'Globalization and organizations' (Karimi & Konsynski, 1991). Particular focus, is put on the notion of how globalization has led to the emergence of the Multinational enterprises as a more common organizational form and how this has had an impact on the way in which control and decision-making is structured (Baliga & Jaeger, 1984). Further, many of the referenced authors within this topic draw relations between the multinational organization and information systems through texts such as Carlyle's (1988) on managing Information Systems in multinationals and Basche's (1983)report on the impact that data transmission has on the management of international companies. Thus, the theme highlights a focus on creating understanding about how the hybrid organizational form and the management of data and information systems have become important.

Additional issues related to that of Globalization which Karimi and Konsynski (1991) raise are found through their use of references that deal with strategic planning and competitive advantage. Authors, such as Engelhoff (1982) who puts focus on how strategy and structure in multinational corporations is related to creating an information processing approach are included as well as a focus on how the competitive market has changed in a Global world (Chandler, 1986). Through the themes observed in the headlines of text as well as the references used it becomes apparent how the authors (Karimi & Konsynski, 1991) make use their idea of a 'Global Information Management Strategy' (Karimi & Konsynski, 1991, p. 19) to tie together the challenges posed through a changing global market and the implications related to competitive advantage and strategic planning within this (Johnston & Carrico, 1988; Karimi, 1988).

Generalization and meaning – creation of concepts

As outlined above the basic components of the authors discourse for a creation of meaning surrounding 'Global Information Management Strategy' are the topics of 'Globalization and Organizations' and 'Competitive advantage and Strategic planning'.

The meaning creation, within the 'Globalization and Organizations ' is found in the authors (Karimi & Konsynski, 1991) introduction of the concept of 'Evolution' and the use of this to describe the changes within the Global Firm in terms of Structure and Control and Coordination strategies. Within this, meaning is created by outlining the creation of different strategies for organizations within the global world, such as, Multinational Strategy, Global Strategy, International Strategy, and Transnational Strategy (Karimi & Konsynski, 1991, p. 11,12,13) and their impact on the organizational shape and standards. A link, is established with the Coordination and Control topic through the relation to what is required for an organization to manage and operate within these strategies. The creation of meaning from the introduction of these two perspectives on the evolution of the Global Firm results in the creation of success requirements for the Global Firm on a competitive level providing,

"(1) a proper fit between the organization's business strategy and its structure, (2) an organization's ability to adapt its structure in order to balance the environmental forces of national differentiation and global integration for its value-chain activities, and (3) the manner of coordination/control of the organization's value-chain activities. (Karimi & Konsynski, 1991, p. 17)

This meaning creation take on the role of driver for further meaning creation as Karimi and Konsynski (1991) make use of them to support the need of creation of a 'Global Information Management Strategy'. It is fair to deduct, that especially the centrality of the word 'Global' in this discourse surrounding the Information Management strategy process is established through the recognition of the impact of the Global Firm perspective analyzed above.

In investigating, the meaning creation behind the 'Global Information Management Strategy' concept introduced by Karimi and Konsynski (1991) several components are key. Firstly, focus is placed on the notion of 'Global Information Systems' (Karimi & Konsynski, 1991, p. 17) as systems that transcend national boundaries through their speed up of organizational and corporate systems. The authors (Karimi & Konsynski, 1991), then create meaning by introducing how these systems must be thought of in terms of new policies and strategies in order to enable them to function in varying national contexts. Through this claim, the authors (Karimi & Konsynski, 1991) manage to convey centrality as the link between the previously outlined challenges of the Global Firm in terms of coordination, and the use of the Global Information Systems to aid in this challenge and thus the strategy thoughts, seem to become central to the success of the Global Firm.
The discourse, is further driven by the attention made from the authors (Karimi & Konsynski, 1991) through the attention paid to two mechanisms of creating a strategy for Global Information Systems, that is, 'Network Management Strategy and Architecture' (Karimi & Konsynski, 1991, p. 21) and 'Data Management Strategy and Architecture' (Karimi & Konsynski, 1991, p. 22). The centrality, of network management and architecture as concepts is created through the focus within the discourse on the importance of creating knowledge of where applications are executed and located and which communication is linked to this process. The level of detail within this section becomes much more elaborate as it conveys centrality through explicit solution based suggestions through database and architecture suggestions. A key word, drawn from this section in relation to the meaning created within the discourse is the notion of 'Architecture' and creating a structure for how data and information is organized within the international network.

In the final section, of the meaning creation surrounding the concept of 'Global Information Management Strategy' the authors (Karimi & Konsynski, 1991) align the findings from the Global Firm implications with those suggested in relation to the Global Information Systems. Through this they make a final key note as to how the responsibility of creating the strategy for Information Management within a Global Firm should be place among the 'Senior Business Planner' (Karimi & Konsynski, 1991, p. 23) and the 'Senior Information Technology Manager' (Karimi & Konsynski, 1991, p. 24). Key to the meaning created here is the emphasis put on how each of the roles must seek to awareness of each other areas of expertise in terms of both technology and management.

Semantic relation to the meaning of Information Management

The discourse, put forward by Karimi and Konsynski (1991) place emphasis on a number of notions that add to the meaning of Information Management as a concept.

Firstly, through the introduction of the challenges that a new global world brings in relation to Information Management and the structure and control of the multinational organization through different strategies. Secondly, the presentation of a solution to some of these challenges via technology based Global Information Systems and management of these systems. Through this, a link to the semantics of Information Management is created with the emphasis on management of network architecture and data architecture in the facilitation of a viable Global Information Management System.

Finally, the recognition of the facilitator role of this system can be emphasized as an important contribution to the semantics of Information Management as this recognizes the importance of both management and technology professionals to create meaning within each others professional fields by understanding the implications that can arise from both perspectives.

Text 2. Saving IT's Soul: Human Centered Information Management (Davenport, 1994)

Intertextuality and Themes and Topics

The discourse put forward by Davenport (1994), has its base in different topics found within the references of the text. The two main topics, that dominate the discourse context are focused on 'organizations' through emphasis on the network organization (Nohria & Eccles, 1992) and strategic systems planning in line with Lederer and Sethi's (1988)

notions concerning implementation of planning methodologies. Another topic, is 'information' both as a resource and the way in which it can be pieced together (McKinnon & Bruns, 1992). Further, this is underlined through the headline of, 'The trouble with information sharing' (Davenport, 1994) where information sharing is indicated as a difficult task which can be troublesome.

Generalization and meaning – creation of concepts

In the discourse, put forward by Davenport (1994), centrality and meaning is to a high extent created through highlighted quotes that point to the general points and perspectives from the article. Based in, the intertextuality and the topics presented above the first generalization which Davenport (1994) makes is highlighted in the quote,

"Too many managers still believe that once the right technology is in place appropriate information sharing will follow" (Davenport, 1994, p. 120)

Davenport (1994), further elaborates on this through the outline of how common misunderstandings found within organizations are that information sharing is done easily and that the implementation of IT will not change a company's information structure. This establishment, of the situation of IT is present in the next central point that is conveyed through the discourse dealing with the ambiguous nature of 'information'. Centrality, is pointed out through the table marking 'The Information Facts of Life' (Davenport, 1994, p. 122) where emphasis is placed on how information has become so valuable that people will not share it easily, thus supporting the meaning created through the first main point. In addition, Davenport (1994), adds to the complexity surrounding the information concept by describing it as a 'natural mess' (Davenport, 1994, p. 122) with multiple meanings where a balance must be created between what he describes as 'information globalism' (Davenport, 1994, p. 123) and 'information particularism' (Davenport, 1994, p. 123). Linked to this, is the added trouble related to Information Sharing that Davenport (1994) puts forward through outlining this as one of the trickiest issues that management are facing and that a common misunderstanding among employees is that they are suffering from information overload when in fact they are experiencing 'non-information' (Davenport, 1994, p. 125).

The complexity of information outlined enables meaning creation to be generated concerning the central point which Davenport (1994) seeks to put forward, that is the

'Human-Centered' perspective on information handling and management. Special focus is put on the role of the IT manager as part of the enabler of this focus (Davenport, 1994, p. 123). Meaning of the human-centered notion is created through the introduction of the concept of human-centered approaches (Davenport, 1994, p. 123) where the individual is put into focus rather than the machine.

Davenport's (1994) point in regards to the difficulties of creating information sharing within organizations through a human-centered approach leads him to introduce a further meanings creation concept, that is the need to create a 'Cultural ground for IT' (Davenport, 1994, p. 127). The meaning creation, of this culture is created through the suggestion of multiple tools in line with information mapping, information guides, business documents and groupware to facilitate the coordination of information sharing within an organization (Davenport, 1994, p. 129).

Semantic relation to the meaning of Information Management

Davenport (1994) makes a new addition to the semantics of Information Management through the outline of information not only as a valuable resource but also as an uncontrollable one. Through this, increased complexity, the perspective of the human-centered approach is presented in order to aid the handling and sharing of information. Davenport's (1994), introduction of the human-centered Information Management concept creates a link between the individual and the management of information, thus recognizing that the two are connected and underlining that there is a need for investigation within the individuals behavior and Information Management.

In order, to create this link, Davenport (1994) seeks an understanding of how different tools such as information maps, guides and groupware can aid in easing this process. However, the point that is clear is that the machines or computers can not in themselves solve the information ambiguity, rather they may create more confusion and complexity.

Finally, Davenport (1994) makes an addition to the meaning of Information Management through the suggestion of how focus should be put on creating sustainable information cultures within an organization.

Text 3. The Global Network Organization of the Future: Information Management Opportunities and Challenges (Jarvenpaa & Ives, 1994)

Intertextuality and main themes and topics

The intertextuality, which is discovered within this discourse put forward by Jarvenpaa and Ives (1994) is focused on the 'Virtual World' and the impact which this has on organizations (Davidow & Uttal, 1992) and affects on Information Technology used (Clemons, Row, & Miller, 1992). One of the main themes, found within the headlines of the text further underline the focus on the impact of the virtual world through including a scenario dealing with 'IT enabled Group Web' (Jarvenpaa & Ives, 1994, s. 27). The focus, is also put, both in the references and the general themes, on the emergence of the Network Organization as a global and flexible organization (Bahrami, 1992). This emergence leads the discourse towards an investigation of the Challenges that arise for information practices through this development (Huber, 1990).

Generalization and meaning – creation of concepts

In the discourse, the authors (Jarvenpaa & Ives, 1994) make use of the outline of the concept of 'Global Network Organization' as the base for their meaning creation. The 'Network organization' as a concept is positioned as the transformed organization of the future (Jarvenpaa & Ives, 1994, p. 34) and there though as a force to be reckoned with. For the creation of meaning of this organizational type the notion of a Spider's web is introduced (Quinn, 1992) in order to convey the meaning of a tangled organization woven together in a tight web. Ghoshal and Bartlett's (1990) notion on how the network is composed of different nodes are further used in the discourse to establish centrality in regards to the importance of coordination within the organization in order to enable collaboration within the network.

The implications, related to the Network Organizational form is then scrutinized through the introduction of a concept of the 'IT enabled Global Web' (Jarvenpaa & Ives, 1994, p. 27) tying together machines, computers etc. within an network organization. From this, the authors (Jarvenpaa & Ives, 1994) introduce the concepts of 'Information Architecture', 'Creating values, Attitudes and behaviors for Information Sharing' and 'Information Access and Use' (Jarvenpaa & Ives, 1994, p. 44,46,47) as ways in which coordination and structure can be added to the global web. Within the discourse this introduction enables Jarvenpaa and Ives (1994) to construct meaning of what is meant by the 'IT enabled'

global web in terms of more than the hardware application. Meaning is also created through the introduction of the human element of in terms of Jarvenpaa and Ives's (1994) focus on the empowerment of the 'Knowledge worker' (Jarvenpaa & Ives, 1994, p. 41). These workers represent the ones within the network organization that are at the base of the spiders web and must be cultivated through empowerment and development of their skills in order for the organization to benefit from their work (Jarvenpaa & Ives, 1994). The relation, to Information Management is drawn here through the pose of challenges in relation to this empowerment and the facilitation of information that can enable knowledge creation. However, the authors (Jarvenpaa & Ives, 1994), also point to an opportunity within Information Management where the right facilitation can generate benefit for the individual worker and the network as a whole.

In contrast, to the meaning constructed concerning the network organization and the internal placement of the knowledge workers and their information sharing, Jarvenpaa and Ives (1994) also present challenges that arise in terms of external demands from the global customers for personalized products and services. Meaning is created here, through the presentation of Information Management challenges that organizations are facing when meeting these demands (Jarvenpaa & Ives, 1994, p. 48) in terms of the construction of databases and application.

In the discourse, Jarvenpaa and Ives (1994) seek to construct meaning of opportunities and challenges related to Information Management within the global Network Organization through the introduction of the role of the 'Information Systems Executive' (Jarvenpaa & Ives, 1994, p. 52). The description, of this role, is constructed through the idea that the future will see a diminish of the IT specialist and that this role will be replaced by a strategic opportunity for the Information Management field. Though this, the authors (Jarvenpaa & Ives, 1994) point towards the role of an information manager that provides a technological knowledge but also includes strategic management thinking.

Semantic relation to the meaning of Information Management

The discourse presented adds to the meaning of Information Management in regards to the possible challenges and opportunities that arise within the new Global Network Organization.

The first addition to the semantics, is found in the recognition of the need to create a further understanding of IT and the 'knowledge worker' within the organization. In order,

to utilize these means thought must go into developing sustainable and long term solution rather than going for easy fixes. Jarvenpaa and Ives (1994) present Information Management as an opportunity to facilitate and create a shared understanding within the organization. The concept, that is introduced in relation to this is the creation of a strong and adaptive information architecture to support this as well as the creation of information culture.

Through the introduction, of the notion of the 'Global Customer', Jarvenpaa and Ives (1994) point to some of the challenges that the Information Management function must also aid with within a Global network. Here the interesting observation of an increasing demand from the users become key for the authors (Jarvenpaa & Ives, 1994) construction of meaning surrounding Information Management as an enabler for making this happen.

Text 4. An Organizational Memory Approach to Information Management (Anand, Manz, & Glick, 1998)

Intertextuality and main themes and topics

Investigating the underlying intertextuality, a new perspective seem to emerge in the discourse by Anand, Manz & Glick (1998) concerning individual memory and cognition within organizations. Within this overall theme, topics such as 'Intuitive decision-making' (Agor, 1988) and 'Managerial and Organizational Cognition' (Walsh, 1995) dominate the references. In addition, a link is established through the inclusion of references to information systems and how they can support distributed cognition (Boland, Tenkasi, & Te'eni, 1996).

Generalization and meaning – creation of concepts

The core concept, that is introduced as the basis for the perspectives presented in Anand, Manz and Glick's (1998) discourse is the concept of 'Transactive Memory'. The meaning constructed surrounding transactive memory is created on the basis of the notion of information that is held within groups of people and can transcend from being held within the individual memory of the group members to residing in directories where the members of the group know where to find it (Anand, Manz, & Glick, 1998, p. 797). The authors (Anand, Manz, & Glick, 1998), create further meaning through the application of transactive memory to organizations and the placement of it as an influential force within

organizations (Anand, Manz, & Glick, 1998, p. 798). The creation, of the link between the transactive memory ideas and organizational dynamics enable a meaning creation surrounding the differences in what the authors (Anand, Manz, & Glick, 1998) name Systemic Memory, describing the organization, and Group Memory, describing the individual groups that are found within the organization and the complications that the sharing of information can face within this.

The outline, of these possible challenges allow the authors (Anand, Manz, & Glick, 1998) to justify their presentation of Information Management as a possible concept to help deal with the issues of information and memory conflicts within organizations. However, the introduction of the transactive memory concept implies that the discourse surrounding Information Management presented by the authors (Anand, Manz, & Glick, 1998) becomes highly influenced by concepts such as cognition and intuition. Anand, Manz and Glick (1998) adds to Information Management by suggesting that it not only deals with information but also with enabling sharing of 'soft knowledge' and organizational memory. The meaning creation concerning this, is based in the idea that much information is placed outside the organization or within peoples heads, also referred to as 'Soft'- or Tacit knowledge (Anand, Manz, & Glick, 1998, p. 805), and in order for this to be captured Information Management must seek to understand this dynamic and create procedures that can enable the capture and use of such resources.

The focus, on retaining information and knowledge brings more attention to the individuals and the organizational dynamics rather than information systems. This is further supported, by Anand, Manz and Glick's (1998) conceptualization of how the necessity of understanding how to obtain the information and knowledge that are not yet visible is key to the role of the information manager within an organization.

Semantic relation to the meaning of Information Management

The focus, of the discourse on transactive memory within organizations provides a basis for meaning to be added to Information Management through a more individual based view. This is acquired as Anand, Manz and Glick (1998) in their discourse move away from an information systems perspective and instead choose to put the information and knowledge that individuals create and retain at the heart of their Information Management notion. Through this, the meaning of Information Management in the discourse becomes

of a concept that puts an effort towards understanding and recognizing the existence of information and soft knowledge both within and outside an organization. Further, an understanding of appropriate media for communication of information is also highlighted through the discourse as well as the notion of liability of the source that retains information. An understanding of the people that are involved and the way that they think and store information within their memories, both individually and collectively is key. In the discourse, the authors also make a final note on how it is important that an alignment be created between Information Management and the use of IT within the organization.

Text 5. Towards a Framework for Information Management (Rowley, 1998)

Intertextuality and main themes and topics

Within the references of this discourse (Rowley, 1998) a pattern develops dealing with defining 'Information' through inclusion of ideas from Buckland (1991) about information as a 'thing', and Braman's (Branman, 1989) field based definition of information. Further, the notion of information as a resource is also brought to attention through the introduction of Eaton and Bawden's (1991) text on what kind of resource information is. A link, also seems to exist to the concept of 'Knowledge' and its relationship to information (Koniger & Janowitz, 1995). The establishment of 'What is Information Management? (Rowley, 1998, p. 360) is supported by the recognized references retaining to other scholars (Cronin & Davenport, 1991; Lewis & Martin, 1989; Davenport E. , 1988) work within the Information Management topic.

Generalization and meaning – creation of concepts

The main themes and topics, found within the discourse highlight a focus on Information and Knowledge, and Information Management. In order, to create meaning from these concepts Rowley (1998) coins together the two in her explanation of what Information Management is (Rowley, 1998, p. 360).

In the construction, of meaning of what Information Management is, Rowley (1998) actually contrasts the concept to that of information processing, which deals with the sorting an summarizing of data (Curtis, 1989). The contrast, that is depicted by Rowley (1998) concerning Information Management and information processing is that the first is viewed as the professional control of the information, opposed to the facilitator role of the latter.

Rowley (1998), further seeks a construction of meaning surrounding Information Management through the introduction her own definition of the concept. The first part of the definition outlines the aim of Information Management as,

"The aim of Information Management is to promote organizational effectiveness by enhancing the capabilities of the organization to cope with the demands of its internal and external environments in dynamic as well as stable organizations." (Rowley, 1998, p. 361)

Through this outline, the meaning of Information Management that can be drawn from Rowley's (1998) definition is that Information Management is linked to organizational effectives and further should function as a response to both internal and external demands. Thus, the construction of the concept can be said to be centered round an optimizing and coordinating role within the organization.
The next part of Rowley's (1998) definition then deals with the practical implication as,

"Information Management includes organization wide information policy planning, the development and maintenance of integrated systems and services, the optimization of information flows and the harnessing of leading edge technologies to the functional requirements of end-users, whatever their status or role in the parent organization." (Rowley, 1998, p. 361)

Here, meaning is given to the Information Management concept as practice based where the actions that are required within this field imply balancing internal policy demands with the current systems, as well as user-needs and upcoming trends. Rowley (1998), further suggests that these functions should be controlled by the Information manager, which she gives meaning to through the adding of managing and coordination responsibilities as well as activities in the form of designing and implementation of information systems. This is also in line with the last bit of the Information Management definition provided by Rowley (1998) which outlines two dimensions of Information Management, that is, *" ...the management of the information process and the management of data resources."* (Rowley, 1998, p. 361)

The definition, provided by Rowley (1998) allows for the view that is presented in the discourse from a holistic perspective where the information manager responsibility lies with all of us as we all share and sort information (Cronin & Davenport, 1991). The

picture, of Information Management, that is constructed in the first sections of Rowley's (1998) discourse outline the diverse field within which Information Management exists and therefore meaning is sought through the creation of a framework for Information Management (Rowley, 1998, p. 362, Fig. 1).

The framework created, link together four meaning creating elements, *Information Environment, Information Contexts, Information Systems,* and *Information Retrieval* (Rowley, 1998, p. 363). From an organizational effectiveness perspective that is also highlighted in Rowley's (1998) definition of Information Management given above, the Information Retrieval level is highlighted as a key component. However, the three other elements are meant to aid in the facilitation of information retrieval that is operative for effectiveness (Rowley, 1998). This focus, on information retrieval outcome, is further added meaning through Rowley's (1998) notion of how it can exist on two levels: a mircoinformatic level, dealing with the individuals need and use of information, and a macroinformatic level, taking a more general look a relationship between information, society and the organization.
The information retrieval level, gains another meaning aspect as it is linked back to the topic of information and knowledge that occurs in Rowley's (1998) discourse with the operative notion of how the need for new knowledge and research within Information Management is needed.

Semantic relation to the meaning of Information Management

The discourse, put forward by Rowley (1998), concerning the move towards a Framework for Information Management provides a perspective on what Information Management in fact can be characterized as, and how it can be carried out in practice. Rowley (1998) adds to the meaning of Information Management as a concept by suggesting the link between the concept and organizational effectiveness, there through establishing that there is a need for strategic thinking along these lines within organizations.

Rowley's (1998) framework, also introduces new concepts that can fit under the Information Management umbrella in the form of Information Environment, Information Contexts and Information Retrieval. Through the introduction of these levels, the meaning of Information Management as a concept is broadened to include more than the notion of Information Systems and also implies that consideration must be given in regards to

understanding the situation and outcome of information. The framework leads Rowley (1998) to opt for more research within each of her proposed levels of the framework through her recognition of Information Management as diverse and ambiguous.

Finally, the notion of knowledge creation and the tie to Information Management allows Rowley (1998) to enforce the need for knowledge creation to be facilitated both within Information Management research but also within the organizational context. The underlining, of Information Management as a constructive force in regards to knowledge creation and research enabling highlights that a need for further research of Information Management exists.

3.2.2 Information Management in the Global World of 1990-1999

The construction of Information Management, within this time period can to a large extent be viewed as being influenced by the increased awareness of the Global World and the mechanisms of IT and the multinationalization that drives it. This is visible, in the first text from the period from Karimi and Konsynski (1991) who, in their discourse, opt for the consideration of different strategies towards Information Management within the new multinational companies. In line with the historical observations, the increasing liberalization of the international markets and the technical possibilities in terms of cross national communication and coordination are raising new strategic challenges for organizations. This perspective is further observed in the construction of Information Management that Jarvenpaa and Ives (1994) create through their discourse on the implications of the creation of information architecture and information culture within the Global Networked Organization. The emerging organizational types, also bring Jarvenpaa & Ives (1994) to introduce the notion of 'knowledge worker' putting focus on the creation of a certain type of skilled personnel, relating to the network organization. An interesting link to the historical overview is then that this relates to the need for more IT knowledgeable and skilled personnel arising in the 1990s (Giddens, 2009) and thus this supports Jarvenpaa & Ives (1994) conclusions.

The increasingly important role of IT in relation to Information Management can largely be observed within the texts of this time period. Authors, such as Karimi and Konsynski (1991), Davenport (1994) and Jarvenpaa and Ives (1994), all deal with some of the

practical implications of Information Management and in these descriptions the role of IT dominates the discourses. Through this, the opinions of the function of IT within Information Management vary from a high focus of Information Management as the creator of technology based Global Information Systems (Karimi & Konsynski, 1991) to the role of Information Management as a technical facilitator of information architecture and Information Technology culture (Jarvenpaa & Ives, 1994). Davenport's (1994) discourse however includes another perspective of Information Management and IT by the introduction of the Human Centered approach that recognizes IT as important tools for Information Management, but puts the focus of the Information Manager on the individuals' behavior with information.

The understanding of creating character of Information Management is also promoted in Anand, Manz and Glick's (1998) discourse regarding the recognition of what they deem 'soft-knowledge' and where this understanding comes first and is then to be supported by appropriate media. Here an alignment of Information Management and IT is opted for, but with the focus on Information Management first as a manager of the information and knowledge that an individual retains (Anand, Manz, & Glick, 1998).

Finally, one of the discourses that stand out within those already addressed, is that surrounding Rowley's (1998) framework for Information Management. In Rowley's (1998) Information Management specific discourse the constructive elements are created around the presentation of a framework to function as an enabler of understanding of and further research within Information Management. Rowley (1998) makes an attempt at moving the understanding of Information Management from a theoretical view towards a more practical one, which points to certain levels dealing with information environment, information context, information systems and information retrieval. With this she creates an awareness of how the constructs of Information Management as a concept need to be defined in terms of process and results.

3.3 Time period III: 2000-2010

In the early 2000s, the global society became more and more dominant through the technology enabled possibilities as well as the national societies acceptance of the conditions of the globalized world (Giddens, 2007). The rise of new international and regional government structures increased in number and power underlining the growing connectedness (Giddens, 2009). However, the happenings of September 11th, 2001 when the twin towers in New York were hit by terrorism created an instant and very powerful awareness of the vulnerability that is connected to the global society (Giddens, 2007). Following this time, societies of the world were to an increased extent concerned with the notion of the multiculturalism that was spreading through the increased globalization, and Giddens (2007) notes that where this has earlier been tied to a mainly positive effect of globalization it now takes on a more negative character. Globalization, was suddenly not only thought of as a new world of opportunity but also as a place where the individual and society became more vulnerable.

The time period, was further influenced by a focus on more person-centered systems both in work and within the welfare system (Giddens, 2007), This includes the emergence of online social networks where the individual could connect with other individuals across nation boarders and time zones. The individual expression, became increasingly more important as the ability to stand out from others and have your say in the world was becoming more difficult in line with the many new connections and possibilities available (Giddens, 2009). The global connection, of many of the key functions of society also led to increased focus on the notion of a global culture (Giddens, 2009) aided by the occurrence of a new and more specialized computer mediated communication opportunities (Feraud, 2000). Developing from the notion of global culture was a new and very powerful view of individualism where it was up to the single person to construct their own identities (Giddens, 2009).

Growth within technology in terms of the availability of more and more functions online, such as shopping, communicating, banking etc. created a move towards an electronic economy where more and more of the individuals time is spend online (Buchanan, 2006). Further, the electronic economy also created further ties to a Global Community through the integration towards a Global economy (Giddens, 2009).

The outline, of the overall contexts enable an understanding of the time period of 2000-2010 as one where increasing awareness of the opportunities and risk connected to the global environment emerged. Further, the linking of many of the central mechanisms of society on a global level created the move towards a world that was more and more tied together in all aspects. An increased need, to create individual expressions emerged and the identity creation became even more important as the security net of a close-knit society was slowly being pulled away.

3.3.1 Analysis of the selected texts, 2000-2010

An outline, of the chosen texts are displayed below in order to provide an overview of their timely placement and relation.

Author(s)	Title	Publication	Appendix
Schlögl, C. (2005)	*Information and knowledge management: dimensions and approaches*	Information Research	10A
Choo, C.W., Furness, P.S., Van den Berg, H., Detlor, B., Bergeron, P., Heaton, L. (2006)	*Working with information: Information Management and culture in a professional services organization*	Journal of Information Science	10B
Teevan, J., Jones, W. (2006)	*Personal Information Management*	Communication of the ACM	10C
Anand, K.S., Goyal, M. (2009)	*Strategic Information Management Under Leakage in a Supply Chain*	Academy of Management Review	10D
Detlor, B. (2010)	*Information Management*	International Journal of Information Management	10E

Table 3: Overview of the 5 selected texts within the time period from 2000-2010 (For full list see appendix 10)

Text 1. Information and knowledge management: Approaches and Dimensions (Schlögl, 2005)

Intertextuality – main themes and topics

One apparent theme which seems to dominate the intertextuality for the discourse is that of 'Information Management' both in relation to what it is and how it works (Davenport,

Delong, & Beers,, 1998; Ponzi & Koenig, M., 2002) as well as its relation to Knowledge Management (Al-Hawamdeh, 2002; Broadbent, 1998). Further, one of the apparent themes within the intertextuality of the discourse is related to the surrounding environment in the form of references dealing with intellectual capital (Steward, 1997) and the knowledge creating company (Nonaka & Takeuchi, 1995).

Generalization and meaning – creation of concepts

The first main area, which receives focus within the discourse put forward by Schlögl (2005) is that of the Information Management field. In the investigation of this, Schlögl (2005) creates meaning through the construction of a citation map displaying an overview of how the literature about Information Management distributes itself according different fields and in relation to each other (Schlögl, 2005, p. 3) The outline of the information literature enables Schlögl (2005) to comment on the Information Management field through the observation that no authors seem to place themselves within the middle of his model, where he had envisioned the Information Management field to be placed. Thus, the discourse challenges previous meaning creation on the existence of an Information Management discipline by suggesting that Information Management is not, as previously thought interdisciplinary, but rather multidisciplinary in its nature (Schlögl, 2005, p. 4). In order, to seek meaning as to why the topic of Information Management appears to be scattered among disciplines, Schlögl (2005) points to two directions in which lack of collaboration hinders the creation of one Information Management topic, that is information systems and information science. To create understanding, of this division, Schlögl (2005) continues his discourse by conveying centrality of two perspectives on Information Management dealing with technology oriented Information Management and content oriented Information Management.

With Technology-oriented Information Management, Schlögl (2005) constructs meaning by adding together concepts of ‘data management’, dealing with organizational and technical tasks related to data handling for IT personnel and end-users (Schulte, 1987), and IT management as well as strategic use of IT. The main area, of meaning creation within this concept, is thus centered round the use of information systems both practically and strategically.

In comparison, the outline of the meaning behind content-oriented Information Management is much more concerned with the concepts of 'records management' where the information –lifecycle in terms of creation, storage and retrieval is put into focus (Schlögl, 2005, p. 6). This perspective, is linked to the creation of a human-centered view on Information Management in its meaning creation, as the behavior of individuals is placed at the center of the research that s conducted both on an micro and macro level.

Schlögl's (2005) outline, of the two directions for Information Management is broadened through the introduction of 'Knowledge Management as a related concept and an existing part of the Information Management field. According, to Schlögl's (2005) discourse, the concept of Knowledge Management has become a used term for the management of work practices and knowledge sharing within an organization. Closely linked, with the meaning creation of Information Management, Schlögl (2005) describes knowledge management as different than Information Management through its relation to humans, as knowledge exists cognitively within the human mind and only there (Wilson, 2002). Contrarily information is connected to a medium and must process through a human in order to become knowledge. Thus, in the sense making of Schlögl's (2005) discourse the management process connected to information and knowledge have two different objectives.

Semantic relation to the meaning of Information Management

Though the overview of the discourse several contributions to the Information Management semantics are made.

Firstly, the outline of the Information Management literature according to field and citations show that the topic of Information Management is multidisciplinary and that, according to Schlögl (2005) an Information Management field is yet to be identified or created. The outline, of this gap within the literature, allow for extra attention to be made in deciphering the different varieties of Information Management which Schlögl (2005) seeks to do through the introduction of the three areas, technology-oriented Information Management, content-oriented Information Management and knowledge management. This does, to a high extent, add to the semantics of Information Management, as a question can be raised as to whether it is in fact possible to create a one term of Information Management or if it will have to be dependent on the adjectives attached to it.

Text 2. Working with information: Information Management and culture in a professional services organization (Choo, et al., 2006)

Intertextuality – main themes and topics

The main topics, drawn from the intertextuality surrounding Choo et al.'s (2006) discourse are focused round informational, organizational and behavioral themes. The information focus, is found in the inclusion of texts dealing with notions such as 'Information Ecology' (Davenport, 1997) and 'Information Orientation' (Marchand, Kettinger, & Rollins, 2001). The perspective, found in the references on organizations deal to a high extend on the capital that exist within the organization in the form of intellectual capital (Choo & Bontis, 2002) and the intelligent organization (Choo, 2002). Finally, the behavioral focus is drawn from the variety of references dealing with theories of information behavior (Fisher, Erdeles, & McKenie, 2005) as well as the discovery of information behavior in relation to sense making (Solomon, 1997).

Generalization and meaning – creation of concepts

Meaning creation, is structured in this discourse, round the presentation of a study conducted in a Canadian law firm implementing new Information Management initiatives. Within the discourse, the authors (Choo, et al., 2006) present two approaches to Information Management to aid in the meaning creation concerning employees adoption of the concept within the firm under investigation.

The first concept, that is introduced is that of Information Management – Explicit (IME) (Choo, et al., 2006, p. 498). The IME concept, is constructed in order to create meaning surrounding the initiatives that exist within a firm dealing with information policies, procedures and systems for collection. In order, to add to the understanding of this concept the authors (Choo, et al., 2006) discuss the employees of the firm under investigation and their impression of the effect which IME has on 'information use outcomes'. From this, the authors are able to identify how the employees do not seem to relate the notion of IME to increased 'information use outcomes'.

Since the notion of IME does not seem to have impacted the sense of information use outcomes among the employees of the firm, the authors (Choo, et al., 2006) introduce another concept that deal with the practices of mentoring, teaching etc. in relation to information that is Information Management – Tacit (IMT) (Choo, et al., 2006, p. 498).

Here the discourse reveals a high sense of impact that is observed from the employees and thus centrality of the IMT is conveyed by the authors (Choo, et al., 2006) of the discourse.

A third concept, can be observed as central to the discourse carried out, that is the notion of Information Culture (Choo, et al., 2006, p. 501). Within this concept, Choo et al. (2006) place information values, norms and behaviors and again apply their respondent analysis to measure the employees opinion of information use outcomes. The results here, are that Information Culture appears to be the factor with the highest linkage to the perceived information use outcomes, and thus the authors (Choo, et al., 2006) uncover a meaning creation of Information Culture as highly important.

Semantic Relation to the meaning of Information Management

The introduction, of the concepts of Information Management explicit and tacit, enables a new approach to the thought of Information Management within an organization. Through the division of the two it can be said that a composition of Information Management is created which allows for the recognition of multiple approaches to implementing it into an organization. Interestingly, the authors (Choo, et al., 2006) discover that the perceived outcome in terms of information use is the largest from the tacit drivers of Information Management in the form of mentoring and training.

Another, main addition to the understanding of Information Management is the contrast that is presented to 'Information Culture'. The findings, from Choo et al.'s (2006) discourse, show that the perceived information use outcome is to a higher extent linked to the notion of the values, norms and behaviors that reside within a firms information culture. The authors (Choo, et al., 2006), then begin to question the notion of Information Management versus that of information culture in terms of whether the latter in fact trumps Information Management when it comes to information use outcomes. This question, is not answered within the discourse, however the attention that it receives allows for a valid question to be raised in regards to the link between Information Management and culture.

Text 3. Personal Information Management (Teevan, Jones, & Bederson, 2006)

Intertextuality – main themes and topics

The main theme, of this discourse, can be drawn from the few references and the headline of the discursive text that focuses on Personal Information Management. From the references, some sub-topics can be identified dealing with a Personal Information Management review (Jones, 2005) and the psychology of Personal Information Management (Landsdale, 1988). Additionally, the intertextuality that surrounds this discourse is marked by the collaboration of the authors across academic fields ranging from James Teevan (Teevan, Jones, & Bederson, 2006, p. 43) who is from a background in Computer Science and Artificial Intelligence to William Jones (Teevan, Jones, & Bederson, 2006, p. 43), a professor at an Information School and Benjamin B. Benderson (Teevan, Jones, & Bederson, 2006, p. 43) director of a Human-Computer Interaction Lab. Thus, indicating that the topic of Personal Information Management can be assumed to be composed by input from different academic fields.

Generalization and meaning – creation of concepts

Meaning of the central topic of the discourse, Personal Information Management, is created through the presentation of a historic representation of Personal Information Management dating back to the 1980's (Teevan, Jones, & Bederson, 2006). The authors (Teevan, Jones, & Bederson, 2006), then point to how it is now reemerging with a different focus through the adoption of the term within different academic disciplines, among here, Cognitive psychology, Human-Computer Interaction, Database management, Information retrieval, and Library and Information science (Teevan, Jones, & Bederson, 2006, p. 42). This, can be liked to the background for the discourse outlined in the intertextuality as here the mix of authors background also indicated the multidisciplinary nature of the Personal Information Management concept. Given the diversity of the use of the term, the authors try to convey a central meaning of the concept through the outline of how Personal Information Management is,

> *"…intended to support the activities we, as individuals, perform to order our daily lives through the acquisition, organization, maintenance, retrieval and sharing of information."* (Teevan, Jones, & Bederson, 2006, p. 40)

This quote, underlines a focus on the individual and his/her relationship to information. The authors (Teevan, Jones, & Bederson, 2006), create meaning through the presentation

of how other scholars (Whittaker, Bellotti, & Gwizdka, 2006; Karger & Jones, 2006) within Personal Information Management research have highlighted the increasing problem information fragmentation in terms of the many different roles such as, parent, friend, spouse etc. an individual receives information in and how the problem of sorting, storing and retrieving information is to a high extent linked to this.

In addition, Teenvan, Koner and Bederson (2006) create meaning surrounding the reemergence of the Personal Information Management concept through a link to the digitalization of much information. The authors (Teevan, Jones, & Bederson, 2006), point to how, while organizations are making initiatives to enable better control of the increasing information load, individuals are in fact left a bit behind when it comes to how to deal with the increasing information availability. Personal Information Management, is a 'double-edged' (Teevan, Jones, & Bederson, 2006, p. 42) concept within this respect as it enables an easier and quicker access to information but also poses the risk of loss of what is important through the high availability of all information.

Semantic relation to the meaning of Information Management

The addition, of the word 'Personal' to that of Information Management allows for the discourse by Teevan, Jones and Bederson (2006) to bring about a new angle to the meaning of Information Management. Through the connection to the personal and individual level the concept of Personal Information Management is placed in an individual context where focus is placed on the responsibility and challenges that are linked with handling of information on a micro level.

A move is happening, also noted by the authors (Teevan, Jones, & Bederson, 2006), on how the focus on the collective notion of an organization is abandoned in order to make room for thoughts concerning how individuals must manage information in many parts of their lives not just in relation to organizational work and practices.

The discourse, promotes Information Management on a personal level as a tool that can help individuals lessen the time which they use on sorting through information and help them start using the information instead.

Text 4. Strategic Information Management Under Leakage in a Supply Chain (Anand & Goyal, 2009)

Intertextuality – main themes and topics

The main topics, identified in the intertextuality of Anand and Goyal's (2009) discourse appear to be focused round an economic perspective. Through the observation of the references the first main theme that can be detected is that of 'Supply-Chain' in terms of coordination (Cachon, 2003) and information sharing (Chen, 2003). Secondly, focus is drawn toward literature that deals with the economic term of Equilibrium (Cho & Kreps, 1987) and the relation to Asymmetric Information (Daughety & Reingaum, 1994). Finally, a theme concerning the organizational type of oligopoly is apparent in terms of the intertextuality found in the references as authors such as Gal-Or (1985) and Raith (1996) on information sharing in oligopolies and Shapiro (1986) on the cost related to information within this organizational type.

Generalization and meaning – creation of concepts

In the generalization and creation of meaning, within this discourse, the authors (Anand & Goyal, 2009) initiate their reasoning by introducing the concept of 'Information Leakage' (2009, p. 438). With the focus on the supply chain of the firm the leakage concept is presented to describe the situation where a firms interaction within the supply chain with another firm can result in the loss of control and limitation to access of the information shared. The general attitude, towards this concept conveyed by the authors (Anand & Goyal, 2009) is that Information Leakage should be sought to be avoided or at the least controlled by a firm.

The introduction of the Information Leakage concept, brings forward the authors (Anand & Goyal, 2009) second concept of 'Informational Imperatives' which they link to the 'Operational Imperative' as the two key flows within a firms supply chain. Understanding of the Informational Imperative, is created through the introduction of how in basic economics the 'Who knows what' (Anand & Goyal, 2009, p. 440) of information is often considered as fixed when actually it should be thought of in a strategic matter. This consideration of the 'who knows what' and the strategic control of this for both ones own firm and the competitors and suppliers is what lies at the heart of the Informational Imperative (Anand & Goyal, 2009).

It is through the introduction of the Informational Imperative, that the authors notion of Strategic Information Management emerge (Anand & Goyal, 2009, p. 440). The generalization of meaning related to the centrality of this concept within the discourse is centered round the strategic choice of making the optimal trade-offs and decisions in relation to the Informational Imperative throughout the supply chain. On a practical level, the authors (Anand & Goyal, 2009) present meaning in relation to this through the suggestion of how the strategic use can involve both acquisition, sharing and leakage of information that can help maximize profits.

Semantic relation to the meaning of Information Management

The use of Strategic Information Management, within this discourse has its focus on optimizing the maximization of profits within a firms supply chain. Special focus is dedicated to the recognition of the Informational Imperative which should be considered and sought managed by the firm in order to make sure that they are in control of the information sharing and leakage that goes on within the supply chain. Through this view, an understanding of the meaning of Information Management is added through the application of the word 'Strategic' where this words meaning is ascribed through the link to strategic consideration from an economic and profit maximizing perspective.

The discourse provided by Anand and Goyal (2009) opts for a creation of what they term as a rigorous modeling based and analytical understanding of Strategic Information Management (2009, p. 451) where it assume a key role within firms that are placed in a competitive environment.

Text 5. Information Management (Detlor, 2010)

Intertextuality – main themes and topics

The discourse, presented by Detlor (2010) puts Information Management at the center of its intertextuality through the references dealing with the concept through a number of different attached perspectives. Among these are Information Management as research area (Maceviciute & Wilson, 2002), as collection Management (Branin, 2000), as intelligent organization (Choo, 2002), Personal Information Management (Jones W. , 2008), information systems (Sreenivasulu, 2000) and strategic use (McGee & Prusak, 1993). The diversity, in the intertextuality frames the discourse as an overview creating

one that deals with the describing the field of Information Management from a variety of perspectives.

Generalization and meaning – creation of concepts

Deltor's (2010) meaning creation, of Information Management as a concept, is created through the introduction of an initiating description of what it is and its goal, outlined as follows,

" Information Management is the management of the processes and systems that create, acquire, organize, store, distribute, and use information, The goal of Information Management is to help people and organizations access, process and use information efficiently and effectively." (Detlor, 2010, p. 103)

The provision, of this overall outline of the meaning of Information Management from Detlor (2010) is further elaborated on by his introduction of three central perspectives to aid meaning creation of the concept.

The first perspective, is the organizational view of Information Management. Detlor (2010), describes this as the most prominent perspective within Information Management literature. Meaning is created, within this perspective, through the outline of how it is linked to achieving strategic advantage through the utilization of information as an organizational resource. Further, Detlor (2010) creates a link between the organizational perspective and the use of data and records management as the main management activities linked to Information Management within this perspective. A central point, in Detlor's (2010) discourse surrounding this view, is that information technology is to be viewed as a technical medium that hosts the information but not as the main function of Information Management.

The second perspective, adding to the meaning creation of Information Management is the Library perspective (Detlor, 2010, p. 106). Detlor (2010), contrasts this perspective in relation to the organizational one through the placement of focus on the management of the processes surrounding Information Management and not on the use of information. The reason, for this point, is found in Detlor's (2010) argumentation of how librarians are not themselves users of the information, they simply make it available through providing indexing and classification.

The third and final perspective, which Detlor (2010) presents in his meaning creation is the Personal perspective (Detlor, 2010, p. 107). The meaning, of this perspective, is outlined in Detlor's (2010) point of how the focus on Information Management is moved to the individual and not the information. Thus, the main area of concentration is on the use of information by people for personal purposes (Detlor, 2010). The research area, within this perspective further adds to the meaning as it has to do with how individuals create, acquire, organize, store, distribute and use information for personal purposes.

Semantic relation to the meaning of Information Management

The relation, to Information Management, in terms of meaning is significant within this discourse presented by Detlor (2010). Through the outline, of the different perspectives on Information Management, Detlor (2010) provides an overview of how the concept is intertwined within many different perspectives and serve different purposes according to given context.

Especially, meaning is given to Information Management, through the appearance of general processes that are apparent through all of the perspectives, these deal with the creation, acquisition, organization, storage, distribution and usage of information.

As a concluding remark, and centrally conveyed point of his discourse Detlor (2010) promotes how Information Management is to a minor extent about solving technical problems and more about dealing with the human perspective of management of information.

3.3.2 Information Management in a vulnerable and individualistic world of 2000-2010

The construction of the Information Management concept within this time period, show a diversity in the focus areas of the discourses, ranging from searches for the actual meaning of Information Management (Schlögl, 2005; Detlor, 2010) to Personal Information Management (Teevan, Jones, & Bederson, 2006) and Economic use of Strategic Information Management (Anand & Goyal, 2009).

Teevan, Jones and Bederson's (2006) discourse on the reemerging notion of a personal perspective on Information Management relates largely to the observation of individualism (Giddens, 2009) within this time period. The Personal Information Management concept is intended to enable individuals to utilize information better.

The historical rise of more social online communities and the individuals' need for creation of a connection and common belief is visible in the discourse constructed by Choo et al. (2006) on the significant meaning of information culture on the perceived information use outcome. Within this discourse, the authors (Choo, et al., 2006) promote information culture rather than Information Management as a driver of information use and explain how the joint values and norms are becoming increasingly more important for individuals within organizations.

The view of Information Management, presented in Anand & Goyal's (2009) discourse dealing with Information Management within the supply chain, is quite interesting as it moves away from the constructs of IT and human behavior and gives Information Management a profit maximizing ability (Anand & Goyal, 2009). In the previously observed discourses the talk has been focused on organizational coordination and value of Information Management, however the financial perspective has not been included. The interesting results, from the discourse analysis of Anand & Goyal's (2009) text, is the focus on information as a strong resource within the company and how it is to be used as a strategic piece of the puzzle within supply chains in order to control information asymmetry in the favor of one's self. This view does to a high extent promote Information Management as something which must be aligned then with the strategic choices of a company as it plays a valid role in maximizing profits.

The observed historical need for identity creation and impact can be related to two of the discourses (Schlögl, 2005; Detlor, 2010) within this time period dealing with the investigation of the 'identity' of Information Management.

The first of these, is Schlögl's (2005) discourse where the constructs of the meaning of IM appear to indicate the concept in three different manners, technology-oriented, content-oriented and knowledge management. Through this outline Schlögl (2005) further outlines the difficulties of establishing Information Management as a field since the identity of the

concept has not yet been contemplated. A later discourse within the time period from Detlor (2010) is also preoccupied with the creation of a meaning of Information Management. In line with Schlögl's (2005) discourse, the diversity of the field is also presented. However, some general constructs are presented in the form of Information Management dealing with information creation, acquisition, organization, storage, distribution and usage described by Detlor (2010) as the information life-cycle. The two authors, Schlögl (2005) and Detlor (2010) arrive at the same assumption about Information Management, that is that it is a diverse and context dependent discipline and that an actual description of the concept is not easily provided.

3.4 Summing up the analysis in terms of main constructs

From the findings, in the analysis of the academic discourses some conclusions can be made as to constructs describing and surrounding Information Management. I am able to propose 8 main constructs for Information Management that can be drawn from the findings of the analyzed academic texts.

1. Information Management regards information is a value creating resource.

The value based perspective on information, is found within the early discourses from Trauth (1984) and Best (1988) in terms of the establishment of Information as a valuable resource that can be utilized in order to provide advantage for an organization. Within this, is also the view put forward in a later discourse by Anand and Goyal (2009) where information is given a profit maximization value in regards to the supply chain through proper management. Information as a value creating resource is therefore put forward as a construct that support the recognition and ability of Information Management, and therefore is based at the heart of many meaning creation of Information Management.

2. Information Management focuses on individuals and organizations and not on Information Technology(IT), IT should function as a tool for Information Management.

The second construct proposed is based in the notions from Davenport (1994) on the human-centered approach to Information Management. This view further implies that IT is to function as a tool, and the main objective should focus on individuals and organizations, identifying their information needs and behaviors. The focus on the individual is also visible in the later discourse from Anand, Manz & Glick (1998) on the role of the information manager being about management of the knowledge and information that resides within the individual and the organization and then aligning IT to facilitate these processes.

3. Information Management is about coordination and communication of information.

This construct, is drawn from the earliest discourses of the chosen text from the point that Marchand (1978) makes on how the root of Information Management is found the creation of effective coordination processes. Discourses from Rowley (1998) and Choo et

al. (2006) promote the coordination of information communication in terms of sharing and retrieval as main functions relating to Information Management.

4. Information Management is about understanding individual behavior and what drives it.

The fourth construct is created on the basis of the enablement of knowledge workers and an understanding of how Information Management is to facilitate them by creating awareness of individuals information needs and wants (Jarvenpaa & Ives, 1994). The increased awareness, of Personal Information Management highlighted by Teevan, Jones & Benderson (2006) also helps to support this construct through the heightened focus on the way that people organize their own information.

5. Information Management promotes organizational effectiveness and should be viewed as being of strategic importance and aligned with strategic choices within organizations.

This construct follows the views presented by Marchand (1978) and Power (1983) on how Information Management can lead to an increased organizational effectiveness through the facilitation of smoother processes. The construct is also apparent in Karimi and Konsynski (1991) and Anand and Goyal's (2009) discourses concerned with creation of Information Management strategies and the alignment of those according to the organizational type and strategy.

6. The Information Management toolbox encompass: information culture, -environment, -systems, -context, -retrieval, –architecture and life-cycle management.

The idea, behind this construct, is the gathering of all the components that are found within the analyzed discourses that describes methods or areas falling under execution Information Management. According to, the findings from the discourses by Choo et al. (2006) the information culture deals with the establishment of norms, value and behavior for information within the organization and are highly related to the perceived information use and outcome. Within this area, Jarvenpaa & Ives (1994) also promote information culture and information architecture as key tools in the development of Information Management within the global network organization. The notions of information environment, -systems, -context, and retrieval are found from Rowley's (1998) discourse on the different levels of Information Management. These, I found to relate somewhat to

the life-cycle principle that Detlor (2010) puts forward dealing with creation, acquisition, organization, storage, distribution and usage of information.

7. Information Management should educate Information Management professionals

Focus on the educational construct for Information Management, is discovered in the early discourse form Lewis and Martin (1989) where a link is created between the practical need of Information Management professionals and the lack of educational opportunities within this field. The authors (Lewis & Martin, 1989) put focus on the importance of educating students that are able to tackle the Information Management issues for the future. Further emphasis is put on the importance of an information manager in the academic discourses as the enabler of the Information Management processes and initiatives (Jarvenpaa & Ives, 1994; Marchand D. A., 1978; Best, 1988).

8. Information Management is holistic, diverse and context dependent

The holistic and multidisciplinary nature of Information Management is highly visible in the discourses from Schlögl (2005) and Detlor (2010) through the creation of their overview of the Information Management field. Further, both authors (Detlor, 2010) (Schlögl, 2005) point to how the composition of writings and viewpoints within the field portray it as diverse and context dependent.

From the outline of the 8 main constructs above, I have sought to answer the first sub-question dealing with the constructs for meaning creation of Information Management. In order to investigate the proposed constructs further and look into their link to current practical discourses the second sub-question forms the basis for a discussion to be carried out of the possible reflections of the constructs within the practical discourses. This discussion will be carried out in the section below.

4. DISCUSSION

In order to carry out a discussion of the eight constructs the co-reflective (Gergen, 2009) approach, described in the method section, will be used to discuss how the proposed constructs are related and responded to through the two written discourses from the Information Management practitioner companies, Platon and Capgemini. Through the discussion, of the constructs it is the objective to recognize if they play a dominant role or are lacking in their description according to the practitioner view.

Construct 1 : Information is a value creating resource.

The view of information as a value creating resource or asset was found in my analysis to be very fundamental for the discourses surrounding Information Management. In the case of the Information Management specialized company, Platon, the co-reflection (Gergen, 2009) on information is also found to be prominent. Platon emphasize this through the description of their primary objective being to help clients gain value form their own information (appendix 11). Within this the value related to information is implied through the company's recognition of the possibility to gain value from it. The view on information as a resource is more in line with the objectives observed in the academic discourse related to profit maximization (Anand & Goyal, 2009), found in the analysis section above. This is underlined through the focus on information as a strategic asset that can help leverage business goals (appendix 11). Platon further responds to information as a valuable resource in the reflection of their introduction of a knowledge framework, called Platon InSight that is designed to aid the leveraging of information as an asset (appendix 11). Thus, the discourse put forward by Platon in their brochure of services and introductions, reflect the information as a valuable resource to a large extent and viewed from a business perspective in both their objective and part of their service.

Within the second company, Capgemini, the notion of information as a valuable resource is also reflected upon in their description of the Business Information Management service (appendix 12). Here information is deemed one of the most valuable assets for an organization (appendix 12). As with Platon the objective here is exploitation of information to gain business advantage, but included in this reflection is a higher focus on the utilization of what Capgemini describes as data resources. Thus, the reflection on the

information resource is linked with that of data within the discourse presented by Capgemini.

The co-reflection, found within the practical discourses then do support the constructs found within the analysis however the references to the construct are created through a business focus of attaining profits through strategic utilization of information as an asset and further through the connection to data resources.

Construct 2 : Information Management focuses on individuals and organizations and not on IT, IT should function as a tool for Information Management.

The section of this construct, outlining the focus on organizations and individuals is found within the main point put forward by Platon on how the primary objective for Information Management is to facilitate the provision of information for everyone who needs it, in the right form and quality (appendix 11). However, the focus is largely kept on organizations and businesses throughout the discourse that Platon presents. Through the reflection on the issue of technology raised in the initial construct description as the tool for and not the focus of Information Management, Platon's discourse reveals a recognition of how the organizational setup, policies and standards including considerations of architecture are more important than the selection of technology (appendix 11). This statement about technology supports the construct found within the analysis but the services which Platon provides and highlights can argue for a more technology based focus of IT tools, such as Data warehousing, rather than those observed within the academic discourses.

The reflections that are made from Capgemini in regards to the construct are very similar to the ones found within the Platon company, in terms of a recognition of the importance of creating understanding of information within the organization and only then applying the technology (appendix 12). However, Capgemini take a step further as they present their services as technology independent. A further reflection also relies on the previous work of the business information department and how they have been able to base a better control of information on the people, knowledge, culture and infrastructure (appendix 12). Thus, Capgemini presents a reflection that includes the human perspective in a clearer presentation than seen at Platon where the organizational focuses are stronger.

Construct 3: Information Management is about coordination and communication of information.

The reflection of the third construct is hard to depict directly in any of the discourses from the two companies. Platon highlights that one of the problems that has led to the need for Information Management is that organizations have not had the availability of enablers for leveraging information value (appendix 11). Through this attention, Platon's discourse does put focus on the act of the coordination mechanisms and make use of this to highlight the need for their services within Information Management (appendix 11). Capgemini also puts attention to the task of enabling organizations to re-organize themselves in order to become information led companies (appendix 12). However, both of the discourses from the companies do not seem to put the same emphasis on the coordination of constructs as was found in the academic discourses from Marchand (1978), Rowley (1998) and Choo et. al (2006).

Construct 4: Information Management is about understanding individual behavior and what drives it.

Through the academic discourses analysis, this construct focused on Personal Information Management and the observation of the individuals' use of information both personally and professionally. The reflection of this is found within the discourse at Capgemini, as they promote people and knowledge as part of the cornerstone of the services they provide (appendix 12). However the explicit understanding of individual behavior is not reflected within the discourse.

In Platon's discourse the reflection of focus on the individual behavior is to some extent detected in their statement about delivering the right information of proper quality to the right people, since this implies a recognition of both which information people need and the availability of that information (appendix 12). But the notion of information behavior is not found among the services that are provided.

Construct 5: Information Management promotes organizational effectiveness and should be viewed as strategic and aligned with strategic choices within organizations

In the practical discourses from Platon and Capgemini, this construct is reflected upon in various ways. In the discourse presented by Platon, focus of the reflection is found in their strong link between the creation of an information strategy as a part of their service

(appendix 11). The strategy considerations are reflected in Platon's wish to deliver services that can aid in bridging the gap between business strategies and IT solutions, in order to ensure the optimal utilization of information as a resource (appendix 11). This is highlighted in the alignment of their Platon InSense tool that deals with the information life-cycle and how they note that this can be customized to fit the strategies of an organization (appendix 11). Thus, a strong focus is found on the strategic choices and alignment in relation to Information Management. However, the reflections of the discourse on that of organizational effectiveness is not touched upon directly but is indirectly found within the focus of the services on how optimization can be facilitated through their solutions' domains (appendix 11).

The reflection of the fifth construct, is also found in the discourse by Capgemini. Here a lot of focus is put on the strategic facilitation of faster decision-making processes and a help in choice of strategic investments to provide competitive advantage (appendix 12). The discourse from Capgemini emphasizes the creation of an organization that owns the information strategy rather than treating it as a separate entity (appendix 12). This is in line, with the alignment notion drawn from the analysis of the academic discourses. Thus far the view on strategic uses are fairly similar to those found at Platon. However, Capgemini adds to the reflection of organizational effectiveness through the explicit consideration of the determinant meaning of Information Management for the organizations effectiveness. This is included in the first phase of Capgemini's service dealing with the creation of information strategy (appendix 12).

Construct 6: The Information Management toolbox encompass: information culture, -environment, -systems, -context, -retrieval, –architecture and life-cycle management
In the practical discourses, the toolboxes for Information Management are reflected to some extent, however both the company also introduce new and more specific tools to be used for Information Management.

Visible within the tools applied by both the companies, are the notions of information life-cycle management through the focus on observation of storage environments and the creation of architecture. However, the other tools that are reflected in the discourses take on a more company specific character.

In Platon's discourse a number of solution domains are presented in terms of Business Intelligence and cover the use of structured information, among these are, Data Warehouse which relate to the management of data, Masters Data Management in terms of key data about business entities (appendix 11). The two latter, can be argued as data focused rather than information focused. The business intelligence relation is described by Platon as what they started out working with and how this has become less applicable but still plays a vital role within the Information Management toolbox (appendix 11). Business Intelligence also has a central role in the reflection found in Capgemini's discourse where the focus in their text switches from Business Information Management to Business Intelligence Management there through relating each to the other (appendix 12). In fact the reflection becomes even more business intelligence oriented through the relation of business intelligence projects as Information Management projects in the discourses description of successes (appendix 12).

Construct 7: Information Management should educate Information Management professionals

The explanation, of this construct is found in the academic discourse analysis as focused on the education of Information Management professionals through business schools and universities (Lewis & Martin, 1989). Thus, the expected occurrence of this construct is not high, as the practical discourses are centered round the application of services in order to create and implement Information Management initiatives. However, within Platon's discourse a section is dedicated to the training of Chief Information Officers, Information or Business intelligence managers, and business executives within the area of Information Management (appendix 11). The training in Information Management, is thus reflected upon in terms of the training of existing professionals within the organization and offered as part of Platon's service package. In line with the construct discovered in the analysis, an importance in training for Information Management can be said to exist.

Construct 8 : Information Management is holistic, diverse and context dependent

The holistic, diverse and context dependent descriptions of Information Management, figure prominently in the academic discourses from the analysis through the many different scholars influencing the field (Detlor, 2010) (Schlögl, 2005). This notion is reflected upon in the discourse from Capgemini as they highlight the holistic understanding of what is happening around information within an organization is

something they aspire to create (appendix 12). Thus the acknowledgement of the diverse nature of information can also be said to be apparent here as the reflection underlines the holistic view of information. The context dependency is reflected in a more indirect manner within both of the companies' discourses, through the aim of creating business specific solutions (appendix 11 & 12). Both of the companies offer different methods and services to go about this creation, but they further emphasize that the focus is on creating value of the clients own business through customized solutions. This can, to some extent, be related to the findings from the academic analysis where the discourses analyzed often also opt for specialized solutions to the Information Management task following some different overall guidelines (Davenport, 1994; Rowley, 1998).

The discussion of the constructs in relation to practical Information Management discourses, revealed some implications for the academic understanding achieved from the analysis in relation to the different constructs. Thus, in line with this, the main findings concerning what makes up Information Management as a concept, in terms of historical constructs and the effect that these have had on practical discourses, can now be summarized in the following table outlining the eight discovered constructs, their theoretical meaning drawn from the academic discourses and the practical link found within the discourses of Platon and Capgemini.

4.1 Summary of findings from analysis and discussion explaining the 8 Information Management constructs through their theoretical meaning and practical link:

Information Management Constructs	Theoretical meaning	Practical link
1. Information is a value creating resource	Information is a key resource for organizations and individuals and should be managed for proper utilization.	Information Management can provide clients with great value and can serve as a strategic asset that can help leverage business goals
2. Information Management focuses on individuals and organizations and not on IT, IT should function as a tool for Information Management	The focus on Information Management should be on the individual and the organization and how to manage the information that resides within the two. IT is to function as a supportive tool for this but not to be the main objective of investigation.	Focus is on organizations and business. Especially the organizational set-up, policies and standards are in focus. IT application must be aligned with the recognized organization of people, knowledge and infrastructure.

3. Information Management is about coordination and communication of information	It is important to understand the power of coordination and communication processes of Information Management in relation to information creation, sharing and retrieval.	The need for more business initiatives within Information Management has evolved from a lack of focus on coordination mechanisms when it comes to information.
4. Information Management is about understanding individual behavior and what drives it	Information Management must create awareness about individuals' information needs and wants. As well as enable workers to work with and share information.	Information Management in businesses is about getting the right information of a proper quality to the right people.
5. Information Management promotes organizational effectiveness and should be aligned within strategic choices within organizations	Information Management should be considered strategically within organizations and linked with existing organizational types and strategies as it can increase organizational effectiveness.	Information Management has meaning for organizational effectiveness through the bridging of the gap between business strategies and IT solutions. Alignment of these enables faster and better decision-making processes.
6. The toolbox for Information Management encompass: information culture, - environment, - systems, - architecture, - context, - retrieval, and life-cycle management	The most prominent tools for Information Management are centered round creation of a strong information culture, information architecture, and information life-cycle management.	Information Management tools include information life-cycle development through using technical tools to facilitate architecture and storage such as, Data Warehouse, Data Management, Master Data Management and Business Intelligence.
7. Information Management should educate their own professionals	Education for Information Management should establish a link between practical needs and academic knowledge in order to create educated people to tackle Information Management challenges.	Training of organizational executives, CIO's and Business Intelligence managers is an important part of implementing Information Management initiatives.
8. Information Management is holistic, diverse and context dependent	Information Management is holistic and multidisciplinary. Application of Information Management is highly context dependent.	Information Management is about achieving a holistic understanding of information within organizations. Information Management is context dependent and requires specially designed solutions.

Table 4: Outlining the 8 Information Management constructs and their theoretical meaning and practical link.

From the outline of the findings in the table, I am now able to conclude upon the results from my research in relation to how the constructs discovered can assist in the creation of meaning of Information Management from both a practical and academic perspective.

5. CONCLUSION

The objective of my thesis, was to investigate the meaning creation of Information Management as a concept, and which meaning could be formed in terms from a constructivist perspective within different academic discourses dispersed from 1970-2010. Further, I wished to make use of the discovered constructs in order to investigate the links of these to current practical discourses for Information Management.

The investigation of this, was split into two main parts. The first one centered around the identification of the meaning created constructs for Information Management through time. The second, on the way in which the discovered constructs impact current practical discourses of Information Management.

Within the first part of my thesis, dealing with the analysis of academic Information Management discourses, my research led me to the overall discovery of a common ground for Information Management in the form of eight proposed constructs for Information Management. The eight constructs formulated introduced underlying notions about what Information Management is and how it regards certain concepts and tools, they are: **1)** Information Management regards information as a value creating resource, **2)** Information Management focuses on individuals and organizations and not on IT, IT should function as a tool for Information Management, **3)** Information Management is about coordination and communication of information, **4)** Information Management is about understanding individual behavior and what drives it, **5)** Information Management promotes organizational effectiveness and should be viewed as strategic and aligned with strategic choices within organizations, **6)** The Information Management toolbox encompass: information culture, -environment, -systems, -context, -retrieval, –architecture and life-cycle management, **7)** Information Management should educate Information Management professionals, and **8)** Information Management is holistic, diverse and context dependent.

The conclusions from my analysis in the formulation of the eight constructs lead to the discussion within the second part of my investigation, dealing with the co-reflection of the constructs within current practical Information Management discourses from two Danish companies. Through this, I was able to conclude that the eight Information Management constructs where in fact reflected within the practical discourses. The outline of the

relation between the constructs, its theoretical meaning and the practical link displayed in the table summing up the discussion (table 4), revealed that some main similarities and differences could be concluded upon in terms of goals outcome and tools for Information Management. The application of the eight constructs, to the current practical discourses further related back to the initial Foucaultian (1970) notion about how a concept's understanding is influence by it historical meanings and showed how the current meaning creation was in fact, to some extent reflected within the current Information Management discourses.

Therefore, I am able to return to the initial starting point for my thesis, and make a concluding remark in terms of how the created constructs can affect the meaning and view of Information Management.

Through the creation of the eight Information Management constructs, I believe that I have managed to establish an overview of what meaning has been inferred through the historical academic texts for Information Management. As outlined, in the introductory chapter, I do not intend for this overview to make up the definition of Information Management. However, through the application of the constructs in relation to the practical discourses, the created Information Management constructs could function as guides of meaning creation surrounding Information Management for both scholars and practitioners. Even more importantly, I hope that my research can create the basis for a discussion of a common starting point for Information Management when it comes to the meaning of what it is and can entail.

6. FURTHER PERSPECTIVES

The conclusions presented within my thesis pose some areas for further perspectives in relation to the creation of meaning for Information Management through my created constructs.

A further investigation of the constructs could be carried out in terms of researching their reflection in discourses from other practitioner fields than the one applied in my discussion section. It could be interesting to investigate how the constructs apply, for example in a library practitioner view, in order to identify if the constructs are also visible here or if some new additions emerge. Further, it might also be interesting to step outside of the practitioners deemed information managers and see to which extent the constructs are reflected in the practice of practitioners within the field of marketing, sales, communication etc.

In addition, the suggested eight constructs for Information Management were also proposed as a basis for further discussion in line with the identification of what Information Management is and can entail. Following this it can be argued that the eight constructs would have to be subjected to further research in terms of identifying their implications when posed to a variety of practitioners and scholars dealing with Information Management. This could be done through the use of qualitative interviews (Rasmussen, Østergaard, & Beckmann, 2006) or focus groups (Rasmussen, Østergaard, & Beckmann, 2006) where Information Management professionals could be allowed to discuss and bring input into what they themselves infer into the constructs. This also relates to my concluding note, on how I whish for the eight created constructs to bring on renewed discussion as to what Information Management is and seek to unite the scholars that write about the subject.

In my literature review, I touched upon the notion from Black (2005) on how every discipline needs a history. My analysis drew inspiration from this notion in order to create my timely dispersed analysis of academic discourses for Information Management. However, an interesting contrast to the eight constructs created could be to investigate the practical history of Information Management discourses. This could be carried out on a micro level through the trace of the role Information Management within the companies

structure and observe which processes and evolution it has gone through. Further, it could be investigated on a macro level through the inclusion of many different practitioners from the fields of library science, information systems, communication departments, business intelligence etc. to investigate how their roles have changed or developed within the time period of 1970-2010. Through such an investigation, it could be possible to connect the findings with my created constructs in order to see how they are reflected in each other. This could ultimately result in the creation of a very interesting insight into the historical occurrence of Information Management and perhaps, in line with Nowé's (2005) and Black's (2005) notion create a stronger Information Management community.

The outline of these further perspectives aids in confirming the need for more research in relation to the created Information Management constructs as well as for a discussion of the nature of the Information management concept. I believe, that opting for more research within these constructs can enable a move towards a further understanding of meaning for Information Management.

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_version=1&_urlVersion=0&_userid=523703&md5=90fe0fd9fc120d31d258d8e3737ef993

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Wilson. (1989). Towards and Information Management Curriculum.

Wormell, I. (1989). Strategic Information Management to improve competitiveness. *Information Services & Use , 9*, 197-204.

APPENDIX 1

Overview of academic texts, 1970-2010

Reference	Year
Lewis, D.A. and Martin, W.J. (1989). Information Management: State of the art in the United Kingdom. Aslib Procedings, 41 (7/8). Printed in Great Britain	1989
Trauth, E.M. (1984). Research-oriented perspective on information management. Journal of Systems Management, 35(6), 12.	1984
Marchand, D., "Information Management in Public Organizations: Defining A New Resource Management Function," The Bureaucrat, Winter 1978, pp. 4-10	1978
Best, D. P. (1988). The Future of Information Management. International Journal of Information Management, 8(13-24).	1988
Power, Daniel J. (1983), "The Impact of Information Management on the Organization: Two Scenarios." MIS Quarterly; Sep83, Vol. 7 Issue 3, p13-20, 8p,	1983
Jackson, Ivan F. (1989), Information Management: A New Dimension., Journal of Information Technology (Routledge, Ltd.); Sep89, Vol. 4 Issue 3, p136, 9p	1989
Wormell, I. (1989) "Strategic Information Management to improve competitiveness" Amsterdam. PAYS-BAS:IOS Press	1989
Wilson, T.D. (1989). "Towards an information management curriculum". Journal of Information Science, 15(4-5), 203-209	1989
Trauth, E., "Information Management from A Holistic View of Information Processing in the Organization," Proceedings of the 44th ASIS Annual Meeting, Volume 18, 1981, pp. 132-33.	1981
L. Davenport and B. Cronin, (1988 "Strategic information management: Forging the value chain" International Journal of Information Management Volume 8, Issue 1, March 1988, Pages 25-34	1988
R.Kent Jones (1978) "Language universalization for improved information management: The necessity for esperanto", Information Processing & Management Volume 14, Issue 6, 1978, Pages 363-368	1978
JENNIFER ROWLEY (1998) "Towards a Framework for Information Management" International Journal of Information Management Volume 18, Issue 5, October 1998, Pages 359-369	1998
Anand, Vikas, Manz, Charles C. Glick, William H. (1998) "AN ORGANIZATIONAL MEMORY APPROACH TO INFORMATION MANAGEMENT." Academy of Management Review; Oct98, Vol. 23 Issue 4, p796-809, 14p	1998
Davenport, Thomas H.(1994)" Saving IT's Soul: Human-Centered Information Management." Harvard Business Review; Mar/Apr94, Vol. 72 Issue 2, p119-131, 12p,	1994
English, Larry P. (1996)"Redefining information management." Information Systems Management; Winter96, Vol. 13 Issue 1, p65, 3p	1996
Joyce Kirk, 1999 "Information in organisations: directions for information management" Information Research Vol. 4 No. 3,	1999
Galliers, Robert D (1995) "A Manifesto for Information Management Research" British Journal of Management; Dec95 Special Issue, Vol. 6 Issue 6, p45, 8p, 2 Diagrams, 5 Charts	1995

Karimi, Jahangir & Konsynski, Benn R.(1991) "Globalization and Information Management Strategies." Journal of Management Information Systems; Spring91, Vol. 7 Issue 4, p7-26, 20p	1991
Lehmann, Hans(1993), Core Competence and learning alliances--the new face of information management?, Journal of Information Technology (Routledge, Ltd.); Dec93, Vol. 8 Issue 4, p217, 9p	1993
Jarvenpaa, Sirkka & Ives, Blake(1994), The Global Network Organization of the Future: Information Management Opportunities and Challenges., Journal of Management Information Systems; Spring94, Vol. 10 Issue 4, p25-57, 33p	1994
Seltsikas, Philip (1999), "Information management in process-based organizations: a case study at Xerox Ltd." Information Systems Journal; Jul99, Vol. 9 Issue 3, p181-195, 15p	1999
Phillips, John T. (1999) "Databases as Information Management Tools." Information Management Journal; Jan1999, Vol. 33 Issue 1, p58, 4p	1999
Phillips, John T.(1999) "Information Management in New Business Models." Information Management Journal; Jul99, Vol. 33 Issue 3, p58, 3p	1999
Lau, Tessa Etzioni, Oren Weld, Daniel , (1999) "PRIVACY INTERFACES FOR INFORMATION MANAGEMENT." Communications of the ACM; Oct99, Vol. 42 Issue 10, p88-94, 7p, tlau@cs.washington.edu, etzioni@cs.washington.edu, weld@cs.washington.edu	1999
MacKenzie, George (1999) "A New World Ahead: International Challenges for Information Management." Information Management Journal; Apr99, Vol. 33 Issue 2, p24, 9p	1999
Choo, C.W., Furness, C.; Paquette, S., van den Berg, H., Detlor, B.; Bergeron, P., Heaton, L. (2006) "Working with information: information management and culture in a professional services organization" Journal of Information Science, 32, 491	2006
Detlor, Brian (2010) "Information management", International Journal of Information Management Apr2010, Vol. 30 Issue 2, p103-108, 6p	2010
Christian Schlögl (2005) "Information and knowledge management: dimensions and approaches" Information Research, Vol 10 No. 4, July 2005	2005
Nowé, K. (2005) "The IM Research Field in view of a 'rational choice' paradigm and an 'institutional theory' paradigm". Svesk Biblioteksforskning Vol. 15:1	2005
Anand, Krishnan S. Goyal, Manu (2009) "Strategic Information Management Under Leakage in a Supply Chain." Management Science; Mar2009, Vol. 55 Issue 3, p438-452, 15p, anandk@wharton.upenn.edu, mgoyal@rhsmith.umd.edu	2009
Teevan, Jaime Jones, William (2006) 2Personal Information Management.2 Communications of the ACM; Jan2006, Vol. 49 Issue 1, p40-43, 3p, teevan@csail.mit.edu, williamj@u.washington.edu	2006
Middelton, M. (2006) "A framework for information management: Using case studies to test application." International Journal of Information Management 27 (2007). 9-11	2006

Karger, David R. Jones, William(2006) "Data Unification in Personal Information Management." Communications of the ACM; Jan2006, Vol. 49 Issue 1, p77-82, 6p, karger@theory.lcs.mit.edu, williamj@u.washington.edu	2006
Whittaker, Steve Bellotti, Victoria Gwizdka, Jacek (2006) "Email in Personal Information Management.# Communications of the ACM; Jan2006, Vol. 49 Issue 1, p68-73, 6p .whittaker@sheffield.ac.uk, belloti@parc.xerox.com, jgwizdka@scils.rutgers.edu	2006
Tonta, Yaşar (2005) "Internet and electronic information management." Information Services & Use; 2005, Vol. 25 Issue 1, p3-12, 10p tonta@hacettepe.edu.tr	2005
TALLON, PAUL P. (2010), "Understanding the Dynamics of Information Management Costs." Communications of the ACM; May2010, Vol. 53 Issue 5, p121-125, 5p, 1 pptallon@loyola.edu	2010
Johansson, Eva (2009) "Information management for materials supply systems design." International Journal of Production Research; Apr2009, Vol. 47 Issue 8, p2217-2229, 13p	2009
Honggeng Zhou Collier, David A. Wilson, Darryl D. (2008) "The relationship of strategic business alignment and enterprise information management in achieving better business performance." Enterprise Information Systems; May2008, Vol. 2 Issue 2, p201-220, 20p, 1 , Honggeng.zhou@unh.edu	2008
Elsweiler, David Ruthven, Ian Jones, Christopher (2007) "Towards memory supporting personal information management tools." Journal of the American Society for Information Science & Technology; May2007, Vol. 58 Issue 7, p924-946, 23p, david.elsweiler@cis.strath.ac.uk, ian.ruthven@cis.strath.ac.uk, cjones@cis.strath.ac.uk	2007
Smith, Heather A. McKeen, James D.(2007) "DEVELOPMENTS IN PRACTICE XXIV: INFORMATION MANAGEMENT: THE NEXUS OF BUSINESS AND IT." Communications of AIS; 2007, Vol. 2007 Issue 19, p34-46, 13p, jmckeen@business.queensu.ca	2007
Green, Robert (2007) "How CFOs Should Tackle Information Management." Financial Executive; Dec2007, Vol. 23 Issue 10, p44-48, 4p	2007
Gyampoh-Vidogah, Regina Moreton, Robert Proverbs, David (2003), "Implementing information management in construction: establishing problems, concepts and practice." Construction Innovation (Sage Publications, Ltd.); Sep2003, Vol. 3 Issue 3, p157-173, 17p	2003
Sprehe, J. Timothy (2008) "Exploring the Information Management Side of RIM." Information Management Journal; May/Jun2008, Vol. 42 Issue 3, p62-67, 4p , jtsprehe@jtsprehe.com	2008

Pereira, Jorge Verissimo (2009) "The new supply chain's frontier: Information management" International Journal of Information Management; Oct2009, Vol. 29 Issue 5, p372-379, 8p	2009
Schnetzler, M. J. Schönsleben, P. (2007) "The contribution and role of information management in supply chains: a decomposition-based approach." Production Planning & Control; Sep2007, Vol. 18 Issue 6, p497-513, 17p, mschnetzler@ethz.ch	2007
Fallis, D. And Withcomb, D. (2009). "Epistemic Values and Information Management." School of Information Resources and Library Science, University of Arizona, Tucson, Arizona, USA.	2009
Cornish, Graham P.(2005) "Electronic information management and intellectual property rights." Information Services & Use; 2005, Vol. 25 Issue 1, p59-68, 10p gp-jm.cornish@virgin.net	2005

APPENDIX 2

Academic texts, 1970-1989

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Marchand, D., "Information Management in Public Organizations: Defining A New Resource Management	1978	14	3512	37	81					
R.Kent Jones (1978) "Language universalization for improved information management: The necessity for esperanto", Information Processing & Management Volume 14, Issue 6, 1978, Pages 363-368	1978	1	1994	4	19					
Trauth, E., "Information Management from A Holistic View of Information Processing in the Organization," Proceedings of the 44th ASIS Annual Meeting, Volume 18,	1981	6	1234	7	23					
Power, Daniel J. (1983), "The Impact of Information Management on the Organization: Two Scenarios." MIS Quarterly; Sep83, Vol. 7 Issue 3, p13-20, 8p,	1983	15	4239	27	95					
Trauth, E.M. (1984). Research-oriented perspective on information management. Journal of Systems Management, 35(6), 12.	1984	10	3510	7	150					
Best, D. P. (1988). The Future of Information Management. International Journal of Information Management, 8(13-24).	1988	18	5450	23	164					
L. Davenport and B. Cronin, (1988 "Strategic information management: Forging the value chain" International Journal of Information Management	1988	9	4735	16	58					
Lewis, D.A. and Martin, W.J. (1989). Information Management: State of the art in the United Kingdom.	1989	16	11218	141	223					
Jackson, Ivan F. (1989), Information Management: A New Dimension., Journal of Information Technology (Routledge, Ltd.); Sep89, Vol. 4 Issue 3, p136, 9p	1989	1	4220	25	121					
Wormell, I. (1989) "Strategic Information Management to improve competitiveness" Amsterdam. PAYS-BAS:IOS Press	1989	2	3108	17	89					
Wilson, T.D. (1989). "Towards an information management curriculum". Journal of Information Science, 15(4-5), 203-209	1989	5	4008	30	69					

APPENDIX 3

Academic texts, 1970-1989 according to V1

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Best, D. P. (1988). The Future of Information Management. International Journal of Information Management, 8(13-24).	1988	18	5450	23	164	18		1		
Lewis, D.A. and Martin, W.J. (1989). Information Management: State of the art in the United Kingdom. Aslib Procedings, 41 (7/8). Printed in Great Britain	1989	16	11218	141	223	16		2		
Power, Daniel J. (1983), "The Impact of Information Management on the Organization: Two Scenarios." MIS Quarterly; Sep83, Vol. 7 Issue 3, p13-20, 8p,	1983	15	4239	27	95	15		3		
Marchand, D., "Information Management in Public Organizations: Defining A New Resource Management Function," The Bureaucrat, Winter 1978, pp. 4-10	1978	14	3512	37	81	14		4		
Trauth, E.M. (1984). Research-oriented perspective on information management. Journal of Systems Management, 35(6), 12.	1984	10	3510	7	150	10		5		
L. Davenport and B. Cronin, (1988 "Strategic information management: Forging the value chain" International Journal of Information Management Volume 8, Issue 1, March 1988, Pages 25-34	1988	9	4735	16	58	9		6		
Trauth, E., "Information Management from A Holistic View of Information Processing in the Organization," Proceedings of the 44th ASIS Annual Meeting, Volume 18, 1981, pp. 132-33.	1981	6	1234	7	23	6		7		
Wilson, T.D. (1989). "Towards an information management curriculum". Journal of Information Science, 15(4-5), 203-209	1989	5	4008	30	69	5		8		
Wormell, I. (1989) "Strategic Information Management to improve competitiveness" Amsterdam. PAYS-BAS:IOS Press	1989	2	3108	17	89	2		9		
Jackson, Ivan F. (1989), Information Management: A New Dimension., Journal of Information Technology (Routledge, Ltd.); Sep89, Vol. 4 Issue 3, p136, 9p	1989	1	4220	25	121	1		10		
R.Kent Jones (1978) "Language universalization for improved information management: The necessity for esperanto", Information Processing & Management Volume 14, Issue 6, 1978, Pages 363-368	1978	1	1994	4	19	1		11		

APPENDIX 3

Academic texts, 1970-1989 according to

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Trauth, E.M. (1984). Research-oriented perspective on information management. Journal of Systems Management, 35(6), 12.	1984	10	3510	7	150	10	5.2	5	1	
Lewis, D.A. and Martin, W.J. (1989). Information Management: State of the art in the United Kingdom. Aslib Procedings, 41 (7/8). Printed in Great Britain	1989	16	11218	141	223	16	4.5	2	2	
Marchand, D., "Information Management in Public Organizations: Defining A New Resource Management Function," The Bureaucrat, Winter 1978, pp. 4-10	1978	14	3512	37	81	14	4.4	4	3	
Jackson, Ivan F. (1989), Information Management: A New Dimension., Journal of Information Technology (Routledge, Ltd.); Sep89, Vol. 4 Issue 3, p136, 9p	1989	1	4220	25	121	1	4.05	10	4	
Wormell, I. (1989) "Strategic Information Management to improve competitiveness" Amsterdam. PAYS-BAS:IOS Press	1989	2	3108	17	89	2	3.95	9	5	
Best, D. P. (1988). The Future of Information Management. International Journal of Information Management, 8(13-24).	1988	18	5450	23	164	18	3.84	1	6	
Power, Daniel J. (1983), "The Impact of Information Management on the Organization: Two Scenarios." MIS Quarterly; Sep83, Vol. 7 Issue 3, p13-20, 8p,	1983	15	4239	27	95	15	3.51	3	7	
Wilson, T.D. (1989). "Towards an information management curriculum". Journal of Information Science, 15(4-5), 203-209	1989	5	4008	30	69	5	3.21	8	8	
Trauth, E., "Information Management from A Holistic View of Information Processing in the Organization," Proceedings of the 44th ASIS Annual Meeting, Volume 18, 1981, pp. 132-33.	1981	6	1234	7	23	6	2.99	7	9	
L. Davenport and B. Cronin, (1988 "Strategic information management: Forging the value chain" International Journal of Information Management Volume 8, Issue 1, March 1988, Pages 25-34	1988	9	4735	16	58	9	1.89	6	10	
R.Kent Jones (1978) "Language universalization for improved information management: The necessity for esperanto", Information Processing & Management Volume 14, Issue 6, 1978, Pages 363-368	1978	1	1994	4	19	1	1.35	11	11	

APPENDIX 4

Academic texts, 1970-1989 according to Total Rank and overview of the 5 selected texts

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Lewis, D.A. and Martin, W.J. (1989). Information Management: State of the art in the United Kingdom. Aslib Procedings, 41 (7/8). Printed in Great Britain	1989	16	11218	141	223	16	4.5	2	2	4
Trauth, E.M. (1984). Research-oriented perspective on information management. Journal of Systems Management, 35(6), 12.	1984	10	3510	7	150	10	5.2	5	1	6
Marchand, D., "Information Management in Public Organizations: Defining A New Resource Management Function," The Bureaucrat, Winter 1978, pp. 4-10	1978	14	3512	37	81	14	4.4	4	3	7
Best, D. P. (1988). The Future of Information Management. International Journal of Information Management, 8(13-24).	1988	18	5450	23	164	18	3.84	1	6	7
Power, Daniel J. (1983), "The Impact of Information Management on the Organization: Two Scenarios." MIS Quarterly; Sep83, Vol. 7 Issue 3, p13-20, 8p,	1983	15	4239	27	95	15	3.51	3	7	10
Jackson, Ivan F. (1989), Information Management: A New Dimension., Journal of Information Technology (Routledge, Ltd.); Sep89, Vol. 4 Issue 3, p136, 9p	1989	1	4220	25	121	1	4.05	10	4	14
Wormell, I. (1989) "Strategic Information Management to improve competitiveness" Amsterdam. PAYS-BAS:IOS Press	1989	2	3108	17	89	2	3.95	9	5	14
Wilson, T.D. (1989). "Towards an information management curriculum". Journal of Information Science, 15(4-5), 203-209	1989	5	4008	30	69	5	3.21	8	8	16
Trauth, E., "Information Management from A Holistic View of Information Processing in the Organization," Proceedings of the 44th ASIS Annual Meeting, Volume 18, 1981, pp. 132-33.	1981	6	1234	7	23	6	2.99	7	9	16
L. Davenport and B. Cronin, (1988 "Strategic information management: Forging the value chain" International Journal of Information Management Volume 8, Issue 1, March 1988, Pages 25-34	1988	9	4735	16	58	9	1.89	6	10	16
R.Kent Jones (1978) "Language universalization for improved information management: The necessity for esperanto", Information Processing & Management Volume 14, Issue 6, 1978, Pages 363-368	1978	1	1994	4	19	1	1.35	11	11	22

APPENDIX 4A

Marchand, D.A. (1978), *Information Management in Public Organizations. Defining a New Resource Management Function*. The bureaucrat: the journal for public managers. Winter, pp 4-10

OW= 3512	I= 81	IM= 37	SA= 14	*Position: 1970-1989, text no. 1*

Introduction

Paperwork is an ubiquitous aspect of modern public organization. In contrast to the production processes of a manufacturing firm which change raw materials into finished goods, the public organization's primary characteristic is that of an 'information factory' which collects many types of raw data, processes this data through a network of people, procedures, and machines, and produces a variety of finished products in the form of memoranda, letters, records, newsletters, reports, bulletins, and more information requests. The problem with the typical public information factory is that is can produce relevant or irrelevant information, in small or large quantities. Because the production processes of the public organization can produce information relatively easily, whether or not it is demanded or needed, a public agency may have only a limited perception of what information is for the organization's members, managers, or clientele.

Context – drawn from references

Economic perspective, information as a resource: p. 10, ref. to: (2)McDonough, A.M. (1963) *Information Economics and Management.* (13)U.S Commission on Federal Paperwork (1977) *For a proposed methodology for assessing the uses and value of information in public organizations*. (14) U.S Commission on Federal Paperwork (1977), *Definition of Information Resource Management.* (17)Horton, N. (1977), *Budgeting the Data and Information Resource* and Nolan, R.L. (1977)*Controlling the Costs of Data Services*.

Organization: p.10, ref to: (3)Thompson, J.D.(1967), *Organizations in Action*. (7)Dunn, *Psychological structures and information processing*. (8)Wilensky, H.(1967), *Organizational Intelligence.* (12) Tullock, G.(1965), *The Politics of Bureaucracy.*

Information processing: p.10, ref. to: (1)Bentley, T.(1976), *Information, Communication and The Paperwork Explosion*. (4) Dunn, E.S.(1974), *Social Information Processing and Statistical Systems – Change and Reform*. (10) McFarlan, F.W.,Nolan, R.C., Norton, D.P.*, Information Systems Administration*. (11)Simon, H.(1973), *Applying Information Technology to Organizational Design.*

Themes, topics and concepts

- Why the need for Information Management
- Paperwork management programs
- Information Management
- Behavioral Regression
- Organization Effectiveness
- Management of Data Resources
- Managing the information process
- Managing the data resources
- Constraints on information management – 1) theoretical, 2) methodological, 3) organizational, 4) people in organizations, 5) legal, 6) fiscal, 7) maintaining status quo
- Figure 1(p. 6): Outlining what is information management according to two dimensions: managing the information process and managing the data resource
- Figure 2(p.8): Outlining the constraints for information management

APPENDIX 4B

Power, D.J. (1983), *The Impact of Information Management on the organization: Two Scenarios*, MIS Quarterly, September, pp. 13-20

OW= 4239	I= 68	IM= 27	SA= 13	*Position: 1970-1989, text no.2*

Abstract
A concept called information management has been discussed for many years by computer and management scientists. Implementing this concept may revolutionize organizations and have a profound effect on organizationai decision making. Since the technology needed to implement sophisticated information systems is now avaiiable, managers need to address the potentiai impact of this innovation on their organizations. This articie presents two scenarios that may heip managers to anticipate the effect of information management on organizational decision making.

Keywords: information management, organization design, decision making

Context – drawn from references
Decision-Making: p. 20, ref. to: (3)Bass, B.M.(1983), *Organizational Decision Making*. (4)Blumenthal, S.C. (1967), *Breaking the Chain of Command*. (11)Inbar,M(1979), *Routine Decision Making: The Future of Bureaucracy*. (17)Mintzberg, J., Raisinghani, D.& Theoret, A.(1976), *The Structure of 'Unstructures' Decision Processes.*
Database / Data Base: p.20, ref. to: (5)Curtice, R.M.(1975), *Data Independence in Data Base Sustems*. (10)Hugh,G.E.(1974), *The Data Base in a Critical OnLine Business Environment.* (14)Lewis, C.J.(1977), *Understanding Database and Data Base.* (15)Martin, J.(1977), *Computer Data-Base Organization.* (18)Nolan,R.L.(1971), *Computer Data Bases: The Future is Now*. (19)Reside, K.D.& Seiter, T.J. (1974), *The Evolution of an Integrated Data Base.* (20)Robinson, S.L.(1978a), *Computer Data Bases: The Future is Tomorrow*. (21)Robinson, S.L.(1978b), *'Future Shock' Seen Coming in Data base Use*.
Organization and management information systems: p. 20, ref. to: (1)Ackoff, R.L.(1967), *Management Misinformation Systems*. (2)Anthony, R.N.(1965), *Planning and Control Systems: A Framework for Analysis.* (6)Davis, G.B(1974), *Management Information Sytems: Conceptual Foundations, Structure and Development*. (8)Ein-Dor,P.&Segev, E.(1982), *Organiztional Context and MIS Structure: Some Empirical evidence*. (9)Hirshorm, L.(1980), *Scenario Writing: A Development Approach.* (13)Leavitt, H.J.& Withsler, T.L(1958), *Management in the 1980s*.(16)Mintzberg, H.(1977), *The Structuring of Organizations*. (22) Rockhart, J.F. et al(1982), *Future role of the Information Systems Executive.*

Topics, themes and contexts
- Information management
- Organization Design
- Decision Making
- Scenarios as a method
- Organizational decision processes
- Information Management varialbes: Data administrator, Database Management, Data Entry/Output, System Control
- Possible consequesnces of Information Management in terms of administraor, level of control, procedure varieties and forms and systems placement and opportunities within companies

APPENDIX 4C

Trauth, E. (1984), *Research-Oriented Perspective on Information Management*, Journal of Systems Management, July, pp. 12-17

OW= 3510	I= 150	IM= 7	SA= 10	*Position: 1970-1989, text no. 3*

Abstract
The technology that has emerged to facilitate the evolution {rom data 'processing into information processing calls for a concomitment transformation in management perspective, from that of the management of information systems to one of information resource management (IRM). Not only the nature of the technology, but also its widespread dispersion throughout the organization, imply new considerations for planning and control. The corporations that will excel in the 1980's will be those that manage information as a meior resource.

Context – drawn from the references
Information Resource Management: p.17, ref. to: (1)Diebold, J.(1979), *IRM: New Directions for Management.* (2)Datamation(1981), *The Feds Discover IRM.* (5)O'Connell, J.J. *The Fallacy of Information Resource Management.* (9)Editorial Infosystems(1979), *IRM: Will it Fly or Founder*. (15)Computerworld(1981), *Why IRM?*. (18) Holmes, F.W.(1979), *IRM: Organizing for the Office of the Future*.

Management: p.17, ref. to: (10)EDP Analyzer(1979), *What Information do Managers need?* (13)Nolan, R.L.(1979), *Managing the Crisis in Data Processing.* (17) Lucas, H.C.(1979), *Preparing Executives for Corporate Information Management.*

Topics, Themes and Concepts
- Information Resource Management
- Evolutionary nature of information processing – methodologies
- Shift in terminology from data processing to information management
- Information resource Management is not a technological fix
- The data processing manager should not be the information manager
- Information Resource Management is Holistic
- Paperwork Reduction Act
- Factor influencing change
- Significant area of convergence is data/word processing
- Implications for management
- Coordination and corporation effort is key

APPENDIX 4D

Best, D.P. (1988), *The Future of Information Management*, International Journal of Information Management, Vol 8. Pp. 13-24

OW= 5450	I= 164	IM= 23	SA= 18	*Position: 1970-1989, text no. 4*

Abstract
This paper outlines current perceptions about information management (IM), its purpose and role in organizations, discussing why IM will be important in maintaining or improving corporate performance. IM is considered as a methodological attempt to prevent knowledge being lost in information. The introduction defines IM and is followed by a section which examines the idea of information as a manageable resource in relation to issues of current corporate concern. The next section summarizes the current state of IM and the activities included under this heading and its relationship to other information activities. The final section puts forward some ideas about how this field will develop and what expertise and technologies will be required for this development to occur.

Context – drawn from the references
Information Manager: ref. to: (1) White, M.(1985), *Intelligence management.* (2) Wiggins, R. (1985), *The evolving information manager*.

New world of Information Management: ref. to: (4) Toffler, A. (1983), *The third Wave.* (4) Horton, W. (1985), *Information resource management.* (3) Griffiths, P. (1987), *Information Management: A state of the art report.*

Implementing Information Management: ref. to: (6) Best, D.P.(1985), *Information Mapping. An approach to applying IT in organization.* (Varela, A. & Maturana (1976), *Autopoiesis*.

Topics, Themes and Concepts
- Information – manageable resource?
- Management
- Information as a resource
- Current perceptions about information management
- Corporate information management
- Types and uses of information
- Technologies and responsibilities
- Positive and negative feedback
- Goal setting
- Dynamic equilibrium
- Bounded autonomy
- Self organization
- Information transfer

APPENDIX 4E

Lewis, D.A. & Martin, W.J. (1989), *Information management: State of the art in the United Kingdom,* Aslib Proceedings, Vol 41, Issue 7/8, July/August, pp. 225-250

OW=11218	I= 223	IM= 141	SA= 16	*Position: 1970-1989, text no. 5*

No abstract

Context – drawn from references

Information Management impacts: p. 250, ref. to: (2) Wiggins, R.E. (1986), Information management: a BP approach, (3) Willis, M.O.(1987), Financial Services: information management in transition., (7) Weitzler, J. (1987), Strategic information management. (8)Vickers, P.(1986), Information management in the United Kingdom. (9)Horton, F.W. The impact of information management on corporate cultures.
Information Resource Management: p.250, ref. to: (5)Lyttle,R.H.(1988), IRM: a five year perspective. (10) Levitan, K.(1982), Information Resource(s) Management. (12)Caudle, S. (1988), IRM: a look backward and forward at the federal level. (13) English, L.(1988) Results of the 1987 Advanced IRM survey.
Education in Information Management: p. 250, ref to: (15)Anderton, R.H.(1986), Postgraduate education for information management in the United Kingdom. (16) Holland, R.J.(1988) Postgraduate courses in information management and related areas.

Questionaire results from: p.250, ref to: (18) Reply to questionaire(1988) from business within Aslib (association for IM in the UK). (19) Reply to questionaires (1988) from universities such as Henly College

Themes, topics and concepts

- The nature of information management
- The purpose of information management
- Recognition of fundamental characteristics of information management as integrative, content-oriented, organization-wide, dynamic and strategic
- Growing interest in strategic information management
- Information management is and will remain interdisciplinary
- Need for recognition/sponsorship by a 'critical-mass' of top decision-makers
- Link between practice and education for information management

APPENDIX 5

Academic texts, 1990-1999

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Karimi, Jahangir & Konsynski, Benn R.(1991) "Globalization and Information Management Strategies." Journal of Management Information Systems; Spring91, Vol. 7 Issue 4, p7-26, 20p	1991	68	6955	25	66					
Lehmann, Hans(1993), Core Competence and learning alliances--the new face of information management?,	1993	3	4002	12	52					
Davenport, Thomas H.(1994)" Saving IT's Soul: Human-Centered Information Management." Harvard Business Review; Mar/Apr94, Vol. 72 Issue 2, p119-131, 12p,	1994	412	7098	11	262					
Jarvenpaa, Sirkka & Ives, Blake(1994), The Global Network Organization of the Future: Information Management Opportunities and Challenges., Journal of Management Information Systems; Spring94, Vol. 10 Issue 4, p25-57, 33p	1994	270	14539	14	149					
Galliers, Robert D (1995) "A Manifesto for Information Management Research" British Journal of Management; Dec95 Special Issue, Vol. 6 Issue 6, p45, 8p, 2 Diagrams, 5 Charts	1995	31	4320	45	49					
English, Larry P. (1996)"Redefining information management." Information Systems Management; Winter96, Vol. 13 Issue 1, p65, 3p	1996	10	1703	14	37					
JENNIFER ROWLEY (1998) "Towards a Framework for Information Management" International Journal of Information Management Volume 18, Issue 5, October 1998, Pages 359-369	1998	47	5358	66	223					
Anand, Vikas, Manz, Charles C. Glick, William H. (1998) "AN ORGANIZATIONAL MEMORY APPROACH TO INFORMATION	1998	292	6784	28	216					
Joyce Kirk, 1999 "Information in organisations: directions for information management" Information Research Vol. 4 No. 3,	1999	30	8989	78	150					
Seltsikas, Philip (1999), "Information management in process-based organizations: a case study at Xerox Ltd." Information Systems Journal; Jul99, Vol. 9 Issue 3, p181-195, 15p	1999	12	5787	29	17					
Phillips, John T. (1999) "Databases as Information Management Tools." Information Management Journal; Jan1999, Vol. 33 Issue 1, p58, 4p	1999	1	2262	1	19					
Phillips, John T.(1999) "Information Management in New Business Models." Information Management Journal; Jul99, Vol. 33 Issue 3, p58, 3p	1999	2	2160	6	7					
Lau, Tessa Etzioni, Oren	1999	87	4015	2	21					
MacKenzie, George (1999) "A New World Ahead: International Challenges for Information Management." Information Management Journal; Apr99, Vol. 33 Issue 2, p24, 9p	1999	10	5580	3	22					

APPENDIX 6

Academic texts, 1990-1999 according to V1

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Davenport, Thomas H.(1994)" Saving IT's Soul: Human-Centered Information Management." Harvard Business Review; Mar/Apr94, Vol. 72 Issue 2, p119-131, 12p,	1994	412	7098	11	262	412		1		
Anand, Vikas, Manz, Charles C. Glick, William H. (1998) "AN ORGANIZATIONAL MEMORY APPROACH TO INFORMATION	1998	292	6784	28	216	292		2		
Jarvenpaa, Sirkka & Ives, Blake(1994), The Global Network Organization of the Future: Information Management Opportunities and Challenges,, Journal of Management Information Systems; Spring94, Vol. 10 Issue 4, p25-57, 33p	1994	270	14539	14	149	270		3		
Lau, Tessa Etzioni, Oren Weld, Daniel , (1999) "PRIVACY INTERFACES FOR INFORMATION MANAGEMENT."	1999	87	4015	2	21	87		4		
Karimi, Jahangir & Konsynski, Benn R.(1991) "Globalization and Information Management Strategies." Journal of Management Information Systems; Spring91, Vol. 7 Issue 4, p7-26, 20p	1991	68	6955	25	66	68		5		
JENNIFER ROWLEY (1998) "Towards a Framework for Information Management" International Journal of Information Management	1998	47	5358	66	223	47		6		
Galliers, Robert D (1995) "A Manifesto for Information Management Research" British Journal of Management; Dec95 Special Issue, Vol. 6 Issue 6, p45, 8p, 2 Diagrams, 5 Charts	1995	31	4320	45	49	31		7		
Joyce Kirk, 1999 "Information in organisations: directions for information management" Information Research Vol. 4 No. 3,	1999	30	8989	78	150	30		8		
Seltsikas, Philip (1999), "Information management in process-based organizations: a case study at Xerox Ltd." Information Systems Journal; Jul99, Vol. 9 Issue 3, p181-195, 15p	1999	12	5787	29	17	12		9		
English, Larry P. (1996)"Redefining information management." Information Systems Management; Winter96, Vol. 13 Issue 1, p65, 3p	1996	10	1703	14	37	10		10		
MacKenzie, George (1999) "A New World Ahead: International Challenges for Information Management." Information Management Journal; Apr99, Vol. 33 Issue 2, p24, 9p	1999	10	5580	3	22	10		11		
Lehmann, Hans(1993), Core Competence and learning alliances--the new face of information management?,	1993	3	4002	12	52	3		12		
Phillips, John T.(1999) "Information Management in New Business Models." Information Management Journal; Jul99, Vol. 33 Issue 3, p58, 3p	1999	2	2160	6	7	2		13		
Phillips, John T. (1999) "Databases as Information Management Tools." Information Management Journal; Jan1999, Vol. 33 Issue 1, p58, 4p	1999	1	2262	1	19	1		14		

APPENDIX 6

Academic texts, 1990-1999 according to V2

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
JENNIFER ROWLEY (1998) "Towards a Framework for Information Management" International Journal of Information Management Volume 18, Issue 5, October 1998, Pages 359-369	1998	47	5358	66	223	47	6.61	6	1	
Anand, Vikas, Manz, Charles C. Glick, William H. (1998) "AN ORGANIZATIONAL MEMORY APPROACH TO INFORMATION	1998	292	6784	28	216	292	4.01	2	2	
Davenport, Thomas H.(1994)" Saving IT's Soul: Human-Centered Information Management." Harvard Business Review; Mar/Apr94, Vol. 72 Issue 2, p119-131, 12p,	1994	412	7098	11	262	412	3.99	1	3	
English, Larry P. (1996)"Redefining information management." Information Systems Management; Winter96, Vol. 13 Issue 1, p65, 3p	1996	10	1703	14	37	10	3.81	10	4	
Joyce Kirk, 1999 "Information in organisations: directions for information management" Information Research Vol. 4 No. 3,	1999	30	8989	78	150	30	3.41	8	5	
Galliers, Robert D (1995) "A Manifesto for Information Management Research" British Journal of Management; Dec95 Special Issue, Vol. 6 Issue 6, p45, 8p, 2 Diagrams, 5	1995	31	4320	45	49	31	3.21	7	6	
Karimi, Jahangir & Konsynski, Benn R.(1991) "Globalization and Information Management Strategies." Journal of Management Information Systems; Spring91, Vol. 7 Issue 4, p7-26, 20p	1991	68	6955	25	66	68	2.6	5	7	
Lehmann, Hans(1993), Core Competence and learning alliances--the new face of information management?,	1993	3	4002	12	52	3	1.9	12	8	
Jarvenpaa, Sirkka & Ives, Blake(1994), The Global Network Organization of the Future: Information Management Opportunities and Challenges., Journal of Management Information Systems; Spring94, Vol. 10 Issue 4, p25-57, 33p	1994	270	14539	14	149	270	1.21	3	9	
Seltsikas, Philip (1999), "Information management in process-based organizations: a case study at Xerox Ltd." Information Systems Journal; Jul99, Vol. 9 Issue 3, p181-195, 15p	1999	12	5787	29	17	12	1.2	9	10	
Phillips, John T. (1999) "Databases as Information Management Tools." Information Management Journal; Jan1999, Vol. 33 Issue 1, p58, 4p	1999	1	2262	1	19	1	0.92	14	11	
Phillips, John T.(1999) "Information Management in New Business Models." Information Management Journal; Jul99, Vol. 33 Issue 3, p58, 3p	1999	2	2160	6	7	2	0.82	13	12	
Lau, Tessa Etzioni, Oren	1999	87	4015	2	21	87	0.62	4	13	
MacKenzie, George (1999) "A New World Ahead: International Challenges for Information Management." Information Management Journal; Apr99, Vol. 33 Issue 2, p24, 9p	1999	10	5580	3	22	10	0.5	11	14	

APPENDIX 7

Academic texts, 1990-1999 according to Total Rank and overview of 5 selected texts

Reference	Year	SA	OW	IM	I	V1	V2	Rank 1	Rank 2	Total Rank
Anand, Vikas, Manz, Charles C. Glick, William H. (1998) "AN ORGANIZATIONAL MEMORY APPROACH TO INFORMATION MANAGEMENT." Academy of Management Review; Oct98, Vol. 23 Issue 4, p796-809, 14p	1998	292	6784	28	216	292	4.01	2	2	4
Davenport, Thomas H.(1994)"Saving IT's Soul: Human-Centered Information Management." Harvard Business Review; Mar/Apr94, Vol. 72 Issue 2, p119-131, 12p,	1994	412	7098	11	262	412	3.99	1	3	4
JENNIFER ROWLEY (1998) "Towards a Framework for Information Management" International Journal of Information Management Volume 18, Issue 5, October 1998, Pages 359-369	1998	47	5358	66	223	47	6.61	6	1	7
Karimi, Jahangir & Konsynski, Benn R.(1991) "Globalization and Information Management Strategies." Journal of Management Information Systems; Spring91, Vol. 7 Issue 4, p7-26, 20p	1991	68	6955	25	66	68	2.6	5	7	12
Jarvenpaa, Sirkka & Ives, Blake(1994), The Global Network Organization of the Future: Information Management Opportunities and Challenges., Journal of Management Information Systems; Spring94, Vol. 10 Issue 4, p25-57, 33p	1994	270	14539	14	149	270	1.21	3	9	12
Joyce Kirk, 1999 "Information in organisations: directions for information management" Information Research Vol. 4 No. 3,	1999	30	8989	78	150	30	3.41	8	5	13
Galliers, Robert D (1995) "A Manifesto for Information Management Research" British Journal of Management; Dec95 Special Issue, Vol. 6 Issue 6, p45, 8p, 2 Diagrams, 5 Charts	1995	31	4320	45	49	31	3.21	7	6	13
English, Larry P. (1996)"Redefining information management." Information Systems Management; Winter96, Vol. 13 Issue 1, p65, 3p	1996	10	1703	14	37	10	3.81	10	4	14
Lau, Tessa Etzioni, Oren Weld, Daniel , (1999) "PRIVACY INTERFACES FOR INFORMATION MANAGEMENT." Communications of the ACM; Oct99, Vol. 42 Issue 10, p88-94, 7p, tlau@cs.washington.edu, etzioni@cs.washington.edu, weld@cs.washington.edu	1999	87	4015	2	21	87	0.62	4	13	17
Lehmann, Hans(1993), Core Competence and learning alliances--the new face of information management?, Journal of Information Technology (Routledge, Ltd.); Dec93, Vol. 8 Issue 4, p217, 9p	1993	3	4002	12	52	3	1.9	12	8	19
Seltsikas, Philip (1999), "Information management in process-based organizations: a case study at Xerox Ltd." Information Systems Journal; Jul99, Vol. 9 Issue 3, p181-195, 15p	1999	12	5787	29	17	12	1.2	9	10	19
Phillips, John T. (1999) "Databases as Information Management Tools." Information Management Journal; Jan1999, Vol. 33 Issue 1, p58, 4p	1999	1	2262	1	19	1	0.92	14	11	25
Phillips, John T.(1999) "Information Management in New Business Models." Information Management Journal; Jul99, Vol. 33 Issue 3, p58, 3p	1999	2	2160	6	7	2	0.82	13	12	25
MacKenzie, George (1999) "A New World Ahead: International Challenges for Information Management." Information Management Journal; Apr99, Vol. 33 Issue 2, p24, 9p	1999	10	5580	3	22	10	0.5	11	14	25

APPENDIX 7A

Karimi, J. & Konsynski, B.R. (1991), *Globalization and Information Management Strategies,* Journal of Management Information

OW=7955	I= 16	IM= 41	SA= 68	*Position: 1990-1999, text no. 1*

Abstract
Recent globalization initiatives have encouraged firms to consider new organizational strategies and to change their coordination and control systems, management processes, and organization structures, leveraging new technologies. Tocompete effectively, at home or globally, firms often cowdinate their activities in the world markets. Coordination has become a key to competitive advantage. Market and
product innovation often involves coordination and parmership across a diverse set of organizational and geographically dispersed entities. What is often lacking for many global firms is aclear strategy for alignment in the evolution of information technology (IT) architecture and the evolving global business strategy. An understanding of administrative options that are available to the general manager in a global environment is important in the derivation of a strategy for the information technology infrastructure. This paper discusses issues that confront the senior executive regarding the evolution of control and organizational structures and the associated information technology management strategy.

KEY WORDS AND PHRASES: globalization, organizational strategies and structures, control and coordination, global infonnation systems management, infonnation systems architecture

Context – drawn from references
Globalization and organizations: p. 25-26, ref. to: (1)Balinga, B.R, and Jaeger, A.M(1984), Multinational corporations, control systems and delegation issues. (3)Bartlett, C.A. and Goshal, S.(1988), Organizating for worldwide effectiveness: the transnational solution. (4)Bartlett, C.A. and Goshal, S(1989), Managing across Borders: The transnational solution. (8)Carlyle, R.E.(1988), Managing IS at multinationals. (10) Doz, Y.L. and Prahalad, C.K.(Fall 1981), Headquarters influence and strategic control in MNCs. (15)Ghoshal, S. and Noria, N.(1989), International differentiation within multinational corporations. (17)Harrigan,K.R.(1985), Strategies for Joint Ventures. (18)Huber, G.P.(1984), The nature and design of post industrial organizations. (25)King, J.(1983), Centralized vs. decentralized options. (36)Miles, R.E.and Snow, C.C(1986), Organizations: new concepts for new forms. (43)Powell, W.(1987), Hybrid organizational arrangements
Strategic planning: p.25-26, ref. to: (12)Engelhoff, W(1982), Strategy and structure in multinational corporations: an information processing approach. (20) Johnston, H.R. and Carico, S.R.(1988), Developing capabilities to use information strategically. (22) Karimi, J.(1988), Strategic planning for information systems: requirements and information engineering methods. (28)King, W.R.(1985), Strategic planning for IS:the state of practice and research. (44)Prahalad,Doz(1981), An approach to strategic control in MNCs.
Competitive advantage: p. 25-26, ref. to: (9)Chandler, A.D.(in 39), The evolution of modern global competition. (21)Johnston, H.R. and Vitale, M.(1988), Creating competitive advantage with interorganizational information systems. (24)Keen, P.G.(1988), Competing in time: Using Telecommunications for Competitive advantage. (30)Konsynski, B. and Warbelow, A.(1989), A coorporating to compete modeling, interorganizational interchange. (39)Porter, M.E.(1986), Competition in Global industries.(41)Porter, M.E.(1987), From competitive advantage to corporate strategy. (42)Porter, M.E(1990), The competitive advantage of nations.
Information, data and systems: p.25-26, ref. to: (2)Barrett, S.and Konsynski(1982), Interorganizational information sharing systems. (5)Basche, J.(1983), Regulating international data transmission: the impact on managing international business. (7)Buss, M.(1980), Managing International Information Systems. (14)Goodhue, D.L and Quillard, Rocket(1988), Managing the data resource: a contingency perspective. (16)Hansen&Hill(1989), Control and audit of electronic data interchange. (19)Inmon(1986), Information Systems Architecture. (23)Keen(1987), An international perspective on managing information technologies. (31)Konsynski&Warbelow(1989), Information partnership – shared data, scared scale. (32)Lu&Farell(1989), Softwaree development: an international perspective. (33)Malone, Yates&Benjamin(1987), Electronic markets and electronic hierarchies. (34)Martin&Leben(1988), Principles of Data Communications. (35)Mead, T.(1990), The IS innovator at Dupont. (45)Romero, V.(1988), Data Architecture: The Newsletter for Corporate Data Planners and Designers. (46)Sauvant, K(1986), International transaction in services: the politics of transborder data flows. (47)Selig, G.J.(1982), A framework for multinational information systems planning.

Themes, topics and concepts

- Globalization of competition
- Globalization and the changes in the business environment
- Evolution of the Global Firm's strategy and structure
- Evolution of the Global Firm's coordination and control strategies
- Global Information Management Strategy
- Global Information Systems
- Alignment of Global Business and Global Information Systems management strategy
- Senior business planner
- Senior information technology manager

APPENDIX 7B

Davenport, T.H (1994), *Saving IT's Soul: Human – Centered Information Management,* Harvard Business Review, March/April, pp. 119-131

OW=7098	I= 262	IM= 11	SA= 420	*Position: 1970-1989, text no. 2*

Abstract
Information technology has a polarizing effect on managers; it either bedazzles or frightens. Those who are afraid of it shun it, while bedazzled IT departments frequently become prisoners of their own fascination, constructing elaborate teebnology architectures and enterprise information models to guide systems development. Senior executives who buy into this view promote technology as the key catalyst of business change. But such technocratic solutions often speceify the minutiae of machinery while disregarding how people in organizations actually go about acquiring, sharing, and making use of information. In short, they glorify information technology and ignore human psychology. It sbouldn't surprise anyone that human nature, good and bad, can throw a wrenech into the best-laid IT plans, yet technocrats are constantly.

Context – drawn from references
Strategic systems planning: p.131, ref. to: (1)Ledere, A.L. & Setchi, V.(1988), The Implementation of Strategic Systems Planning Methodologies. (1)also, Goodhue, D.L., Kirsh, L.J., Quillard, J.A., Wybo, M.D.(1992), Strategic data Planning: Lessons from the Field.
Organizations: p. 131, ref. to: (3)Nohria, N & Eccles, R.G.(1992), Face to Face: Making Network Organizations Work. (4)Orlikowski, W.J(1992), Learning form Notes: Organizational Issues in Groupware Implementation.
Information: p. 131, ref. to: (2)McKinnon,S.M & Bruns, W.J.(1992), The Information Mosaic. (5)Zuboff, S.(1988), In the Age of the Machine.

Themes, topics and concepts
- What is wrong with the view from IT
- A natural mess: multiple information meanings
- The trouble with information sharing
- The information facts of life
- Human-centered IT Managers
- Preparing the culture ground for IT
- Information guides
- Business documents
- Groupware
- The trouble with information sharing

APPENDIX 7C

Jarvenpaa, S. & Ives, B. (1994), *The Global Network Organization of the Future: Information Management Opportunities and Challenges*, Journal of Management Information Systems, Vol. 10, No. 4, pp. 25-57

OW=14539	I= 149	IM= 14	SA= 270	*Position: 1990-1999, text no. 3*

Abstract
The key information processing building blocks for yesterday's organizations were typewriters, carbon paper, filing cabinets, and a government mail service. The constraints of these crude information processing technologies often required workers to be located under one roof and organizations to arrange themselves as efficient, but relatively change-resistant, management hierarchies. Those legacy organization designs have persisted despite fundamental changes in information processing technology. Tomorrow' s successful organizations will be designed around the building blocks of advanced computer and communications technology. The success of these organizations will come from the ability to couple to, and decouple from, the networks of knowledge nodes. These networked organizations will link, on an asneeded basis, teams of empowered employees, consultants, suppliers, and customers. These ad hoc teams will solve one-time problems, provide personalized customer service, and then, as lubricant for subsequent interactions, evaluate one another's performance. In the network organization, structure will dominate strategy, credentials will give way to performance and knowledge, and human resources will be the only sustainable advantage. Despite the promise, networked organizations present difficult
information management challenges. Among these are developing a flexible and efficient information architecture, establishing new values, attitudes, and behaviors concerning information sharing, building databases that can provide integrated customer support on a worldwide basis, and protecting personal freedoms and privacy. Here, we explore the opportunities and challenges that networked organizations will present for information technology management.

KEY WORDS AND PHRASES: information systems architecture, networked organization, organizational knowledge processing, scenario analysis.

Context – drawn from references
Virtual World: pp. 54-57, ref. to: (7) Bly, S.A.; Harrison, S.R & Irwin, S. (1993), Media spaces: bringing people together in a video, audio, and computing environment. (12)Business Week (1991), Your degital future. (14)Business Week (1993), The virtual coorporation. (15)Business week (1993), Building a wireless future. (19)Clemons, E.K; Row, M.C. & Miller, D.B. (1992), Rosenbluth International Alliance: information technology and the global virtual coorporation. (22)Davidow, W.H. & Malone, M.S. (1992) The virtual corporation. (31) Fortune(1991) The marvels of virtual reality. (63)Newsweek (1993), Here's a virtual model for America's industrial giants

Themes, topics and concepts

- IT enabled Global Web
- The transformed organization of the future – A dynamic network
- The competitive strategy of the network organization
- The design of the network organization
- Dynamic network
- Network organizations
- Information Architecture
- Human Resource Management in the network organization
- Challenges for information systems practice and research
- Building a flexible and efficient information architecture across knowledge nodes
- Creating the right values, attitudes, and behaviors for information sharing
- Developing individual competency on information access and use
- Leveraging and interfacing with public information resource
- Building applications and databases around the Global Customer Relationship
- Understanding the boundaries and Limitations of information technology in enabling the virtual corporation
- Using information technology to manage and leverage knowledge workers worldwide and to build barriers to their exit
- Protecting personal privacy and freedom
- Understanding the sociology of the mobile workplace

APPENDIX 7D

Anand, V., Manz, C.C., Glick, W.H. (1998), *An organizational memory approach to information management*, Academy of Management Review, Vol 23, No. 4, pp. 796-809

OW=6784	I= 216	IM= 28	SA= 292	*Position: 1990-1999, text no. 4*

Abstract
We extend and adapt a mode! of group memory to organizations. Using this extended model, we identify information management challenges of the next century and suggest that organizations can address these challenges by locating a large portion of their information-processing activities outside their formal boundaries, by adopting novel socialization tactics, and by focusing on the management oi soft knowledge norms (e.g.. tacit knowledge, judgment, and intuitive abilities). Whereas current theories increasingly equate information management with the management of information technology, we argue that information technology needs to be complemented by organization-level processes related to organizational memory.

Context – drawn from references
Organization: pp. 807-809, ref. to: (16)Daft, R. & Lengel, R.H (1986), Organizational informational requirements, media richness and structural design. (17)Daft, R. & Weick, K.E.(1984), Towards a model of organizations as interpretive systems. (24)Fulk, J. & DeScantis, G.(1995), Electronic communication and changing organizational forms. (26)Garvin, D.A.(1993), Building a learning organization. (31)Huber, G.P.(1991), Organizational learning: The contributing processes and the literatures. (32)Huber, G.P. & Glick, W.H.(1993), Sources and forms of organizational change.
Personal intuition/cognition: pp. 807-809, ref. to: (1)Agnew, N.M., Ford, K.M. & Hayes, P.J.(1994), Expertise in context: Personally constructed, socially selected or reality relevant? (2)Agor, W.H.(1988), The logic of intuitive decision making: how top executives make important decisions. (3) Agor, W.H.(1991), How intuition can be used to enhance creativity in organizations. (7)Boland, R.J., tenkasi, R.V. & Te'eni, D. (1996), Designing information technology to support distributed cognition. (30)Harris, J.E. (1980), Memory aids people use: Two interview studies. (57)Walsh, J.P.(1995), Managerial an organizational cognition: A trip down memory lane. (58)Walsh, J.P. & Ungson, G.R.(1991), Organizational memory. (59)Wegner, D.M.(1986), Transactive memory: A contemporary analysis of the group mind. (60)Wegner, D.M., Guiliamo, T. & Hertel, P.(1985), Cognitive interdependence in close relationships.

Themes, topics and concepts
- Transactive memory in groups
- Applying transactive memory to organizations
- Multiple organizational groups
- Locating information
- Communication media and organizational memory
- Organizational memory and soft knowledge
- Extensions to the multilevel representation
- Organizational memory and information management

APPENDIX 7E

Rowley, J. (1998), *Towards a framework for Information Management*, International Journal of Information Management, Vol. 18, No. 5, pp. 359-369

OW=5358	I= 223	IM= 66	SA= 47	*Position: 1990-1999, text no. 5*

Abstract
This article proposes a framework for information management which has four different levels: information retrieval, information systems, information contexts, and information environments. The first two of these levels, information retrieval and information systems, focus on the individual and their use of information and the systems that are designed to facilitate such use, and constitute the subdiscipline microinformatics. The second two of these levels, information contexts and information environments comprise the sub-discipline macroinformatics. Effective information management needs to address issues at all of these levels and the relationship between these issues. An analysis of perspectives on information management demonstrates the relationship between the proposed framework and earlier contributions on the nature of information management. Further debate on a general information theory, leading to a core terminology, an understanding of the relationships between these terms, coupled with some models that can be applied to information processing, might facilitate a more complete understanding of information management at all of the levels within the framework.

Context – drawn from references
Information, knowledge: pp. 360, ref. to: (7)Buckland, M.(1991), Information as a thing. (14)Braman, S.(1989), Defining information: an approach for policy-makers, (11)Eaton, J.J. & Bawden, D. (1991), What kind of resource is information? (25)Koniger, P. & Janowitz, K.(1995), Drowning in information, but thirsty for knowledge. (5)Court, A.W.(1997), The relationship between information and personal knowledge in new product development.
Information Systems: pp. 360, ref. to: (9)Senn, J.A.(1990), Information Systems in Management, (15)Curtis, G.(1989), Business Information Systems: Analysis, Design and Practice. (8)Lester, G.(1992), Business Information Systems.
Information Management: pp. 360, ref. to: (10)Cronin, B. and Davenport, E. (1991), Elements of Information Management, (16)Lewis, D.A, and Martin, W.J.(1989), Information Management: state of the art in the United Kingdom. (21)Davenport, E. (1988), Information manafement: a perspective. (22)Fairer-Wessels, F.A.(1997), Information management education: towards a holistic perspective. (23)Taylor, A. and Ferrel, S.(1992), Information Management in context. (24)Marchand, D.A.(1982), Information management in public organizations: defining a new resource management function.

Themes, topics and concepts
- What is information management?
- Introducing the framework for information management
- Knowledge creation and Information Management
- Information Manager role
- Interdisciplinary influence on Information Management
- Framework for information management
- Information environments
- Information context
- Information systems
- Information retrieval

APPENDIX 8

Overview of academic texts, 2000-2010

Reference	YEAR	SA	OW	IM	I	V1	V2	Rank V1	Rank V2	Total Rank
Moreton, Robert Proverbs, David (2003), "Implementing information management in construction: establishing problems, concepts and practice." Construction Innovation (Sage Publications, Ltd.); Sep2003, Vol. 3 Issue 3, p157-173, 17p	2003	14	6819	53	101					
Christian Schlögl (2005) "Information and knowledge management: dimensions and approaches" Information Research, Vol 10 No. 4, July 2005	2005	19	4427	56	167					
Nowé, K. (2005) "The IM Research Field in view of a 'rational choice' paradigm and an 'institutional theory' paradigm". Svesk Biblioteksforskning Vol. 15:1	2005	10	4148	39	80					
Tonta, Yaşar (2005) "Internet and electronic information management." Information Services & Use; 2005, Vol. 25 Issue 1, p3-12, 10p tonta@hacettepe.edu.tr	2005	7	4704	12	139					
Cornish, Graham P.(2005) "Electronic information management and intellectual property rights." Information Services & Use; 2005, Vol. 25 Issue 1, p59-68, 10p gp-jm.cornish@virgin.net	2005	1	4779	10	27					
L. (2006) "Working with information: information management and culture in a professional	2006	28	9903	62	463					
Jones, William (2006) 2Personal Information Management.2 Communications of the ACM; Jan2006, Vol. 49 Issue 1, p40-43, 3p, teevan@csail.mit.edu,	2006	53	1263	3	28					
Middelton, M. (2006) "A framework for information management: Using case studies to test application." International Journal of Information Management 27 (2007). 9-11	2006	7	7209	43	180					
Bellotti, Victoria Gwizdka, Jacek (2006) "Email in Personal Information Management.# Communications of the ACM; Jan2006, Vol. 49 Issue 1, p68-73, 6p .whittaker@sheffield.ac.uk, belloti@parc.xerox.com, jgwizdka@scils.rutgers.edu	2006	83	2867	3	54					
Jones, William(2006) "Data Unification in Personal Information Management." Communications of the ACM; Jan2006, Vol. 49 Issue 1, p77-82, 6p,	2006	55	3032	4	57					
Elsweiler, David Ruthven, Ian Jones, Christopher (2007) "Towards memory supporting personal information management tools." Journal of the American Society for Information Science & Technology; May2007, Vol. 58 Issue 7, p924-946, 23p, david.elsweiler@cis.strath.ac.uk, ian.ruthven@cis.strath.ac.uk, cjones@cis.strath.ac.uk	2007	27	15221	11	193					
Green, Robert (2007) "How CFOs Should Tackle Information Management." Financial Executive; Dec2007, Vol. 23 Issue 10, p44-48, 4p	2007	3	1972	2	54					
McKeen, James D.(2007) "DEVELOPMENTS IN PRACTICE XXIV: INFORMATION MANAGEMENT: THE NEXUS OF BUSINESS AND IT." Communications of AIS; 2007, Vol.	2007	2	6008	19	151					
Schnetzler, M. J. Schönsleben, P. (2007) "The contribution and role of information management in supply chains: a decomposition-based approach." Production Planning & Control; Sep2007, Vol. 18 Issue 6, p497-513, 17p, mschnetzler@ethz.ch	2007	4	9481	13	146					
Collier, David A. Wilson, Darryl D. (2008) "The relationship of strategic business alignment and enterprise information management in achieving better business performance." Enterprise Information Systems; May2008, Vol. 2 Issue 2, p201-220, 20p, 1 , Honggeng.zhou@unh.edu	2008	6	6115	48	72					
Sprehe, J. Timothy (2008) "Exploring the Information Management Side of RIM." Information Management Journal; May/Jun2008, Vol. 42 Issue 3, p62-67, 4p , jtsprehe@jtsprehe.com	2008	6	2478	15	31					
Goyal, Manu (2009) "Strategic Information Management Under Leakage in a Supply Chain." Management Science; Mar2009, Vol. 55 Issue 3, p438-452, 15p, anandk@wharton.upenn.edu, mgoyal@rhsmith.umd.edu	2009	25	11447	22	310					
Pereira, Jorge Verissimo (2009) "The new supply chain's frontier: Information management" International Journal of Information Management; Oct2009, Vol. 29 Issue 5, p372-379, 8p	2009	15	5681	12	45					
Johansson, Eva (2009) "Information management for materials supply systems design." International Journal of Production Research; Apr2009, Vol. 47 Issue 8, p2217-2229, 13p	2009	1	6354	10	141					
Fallis, D. And Withcomb, D. (2009). "Epistemic Values and Information Management." School of Information Resources and Library Science, University of Arizona, Tucson, Arizona, USA.	2009	6	9839	58	112					
Detlor, Brian (2010) "Information management", International Journal of Information Management Apr2010, Vol. 30 Issue 2, p103-108, 6p	2010	12	4818	59	239					
TALLON, PAUL P. (2010), "Understanding the Dynamics of Information Management Costs." Communications of the ACM; May2010, Vol. 53 Issue 5, p121-125, 5p, 1 pptallon@loyola.edu	2010	3	3239	14	54					

APPENDIX 9
Academic texts, 2000-2010 according to V1

Reference	YEAR	SA	OW	IM	I	V1	V2	Rank V1	Rank V2	Total Rank
Whittaker, Steve Bellotti, Victoria Gwizdka, Jacek (2006) "Email in Personal Information Management.# Communications of the ACM; Jan2006, Vol. 49 Issue 1, p68-73, 6p .whittaker@sheffield.ac.uk,	2006	83	2867	3	54	83		1		
Karger, David R. Jones, William(2006) "Data Unification in Personal Information Management."	2006	55	3032	4	57	55		2		
Teevan, Jaime Jones, William (2006) 2Personal Information Management.2 Communications of the	2006	53	1263	3	28	53		3		
Choo, C.W., Furness, C.; Paquette, S., van den Berg, H., Detlor, B.; Bergeron, P., Heaton, L. (2006)	2006	28	9903	62	463	28		4		
Elsweiler, David Ruthven, Ian Jones, Christopher (2007) "Towards memory supporting personal information management tools." Journal of the American Society for Information Science &	2007	27	15221	11	193	27		5		
Anand, Krishnan S. Goyal, Manu (2009) "Strategic Information Management Under Leakage in a Supply Chain." Management Science; Mar2009, Vol. 55 Issue 3, p438-452, 15p, anandk@wharton.upenn.edu, mgoyal@rhsmith.umd.edu	2009	25	11447	22	310	25		6		
Christian Schlögl (2005) "Information and knowledge management: dimensions and approaches" Information Research, Vol 10 No. 4, July 2005	2005	19	4427	56	167	19		7		
Pereira, Jorge Verissimo (2009) "The new supply chain's frontier: Information management" International Journal of Information Management; Oct2009, Vol. 29 Issue 5, p372-379, 8p	2009	15	5681	12	45	15		8		
Gyampoh-Vidogah, Regina Moreton, Robert Proverbs, David (2003), "Implementing information management in construction: establishing problems, concepts and practice." Construction Innovation (Sage Publications, Ltd.); Sep2003, Vol. 3 Issue 3, p157-173, 17p	2003	14	6819	53	101	14		9		
Detlor, Brian (2010) "Information management", International Journal of Information Management Apr2010, Vol. 30 Issue 2, p103-108, 6p	2010	12	4818	59	239	12		10		
Nowé, K. (2005) "The IM Research Field in view of a 'rational choice' paradigm and an 'institutional theory' paradigm". Svesk Biblioteksforskning Vol. 15:1	2005	10	4148	39	80	10		11		
Middelton, M. (2006) "A framework for information management: Using case studies to test application." International Journal of Information Management 27 (2007). 9-11	2006	7	7209	43	180	7		12		
Tonta, Yaşar (2005) "Internet and electronic information management." Information Services & Use; 2005, Vol. 25 Issue 1, p3-12, 10p tonta@hacettepe.edu.tr	2005	7	4704	12	139	7		13		
Honggeng Zhou Collier, David A. Wilson, Darryl D. (2008) "The relationship of strategic business alignment and enterprise information management in achieving better business performance." Enterprise Information Systems; May2008, Vol. 2 Issue 2, p201-220, 20p, 1 , Honggeng.zhou@unh.edu	2008	6	6115	48	72	6		14		
Sprehe, J. Timothy (2008) "Exploring the Information Management Side of RIM." Information Management Journal; May/Jun2008, Vol. 42 Issue 3, p62-67, 4p , jtsprehe@jtsprehe.com	2008	6	2478	15	31	6		15		
Fallis, D. And Withcomb, D. (2009). "Epistemic Values and Information Management." School of Information Resources and Library Science, University of Arizona, Tucson,	2009	6	9839	58	112	6		16		
Schnetzler, M. J. Schönsleben, P. (2007) "The contribution and role of information management in supply chains: a decomposition-based approach." Production Planning & Control; Sep2007, Vol. 18 Issue 6, p497-513, 17p, mschnetzler@ethz.ch	2007	4	9481	13	146	4		17		
TALLON, PAUL P. (2010), "Understanding the Dynamics of Information Management Costs." Communications of the ACM; May2010, Vol. 53 Issue 5, p121-125, 5p, 1 pptallon@loyola.edu	2010	3	3239	14	54	3		19		
Green, Robert (2007) "How CFOs Should Tackle Information Management." Financial Executive; Dec2007, Vol. 23 Issue 10, p44-48, 4p	2007	3	1972	2	54	3		18		
Smith, Heather A. McKeen, James D.(2007) "DEVELOPMENTS IN PRACTICE XXIV: INFORMATION MANAGEMENT: THE NEXUS OF BUSINESS AND IT." Communications of AIS; 2007, Vol. 2007 Issue 19, p34-46, 13p, jmckeen@business.queensu.ca	2007	2	6008	19	151	2		20		
Johansson, Eva (2009) "Information management for materials supply systems design." International Journal of Production Research; Apr2009, Vol. 47 Issue 8, p2217-2229, 13p	2009	1	6354	10	141	1		21		
Cornish, Graham P.(2005) "Electronic information management and intellectual property rights." Information Services & Use; 2005, Vol. 25 Issue 1, p59-68, 10p gp-jm.cornish@virgin.net	2005	1	4779	10	27	1		22		

APPENDIX 9

Academic texts, 2000-2010 according to V2

Reference	YEAR	SA	OW	IM	I	V1	V2	Rank V1	Rank V2	Total Rank
Detlor, Brian (2010) "Information management", International Journal of Information Management Apr2010, Vol. 30 Issue 2, p103-108, 6p	2010	12	4818	59	239	12	7.45	10	1	
Choo, C.W., Furness, C.; Paquette, S., van den Berg, H., Detlor, B.; Bergeron, P., Heaton, L. (2006)	2006	28	9903	62	463	28	5.92	4	2	
Nowé, K. (2005) "The IM Research Field in view of a 'rational choice' paradigm and an 'institutional theory' paradigm". Svesk Biblioteksforskning Vol. 15:1	2005	10	4148	39	80	10	3.8	11	3	
Middelton, M. (2006) "A framework for information management: Using case studies to test application." International Journal of Information Management 27 (2007). 9-11	2006	7	7209	43	180	7	3.69	12	4	
Tonta, Yaşar (2005) "Internet and electronic information management." Information Services & Use; 2005, Vol. 25 Issue 1, p3-12, 10p tonta@hacettepe.edu.tr	2005	7	4704	12	139	7	3.45	13	5	
Christian Schlögl (2005) "Information and knowledge management: dimensions and approaches" Information Research, Vol 10 No. 4, July 2005	2005	19	4427	56	167	19	3.3	7	6	
Smith, Heather A. McKeen, James D.(2007) "DEVELOPMENTS IN PRACTICE XXIV: INFORMATION	2007	2	6008	19	151	2	3.14	20	7	
Anand, Krishnan S. Goyal, Manu (2009) "Strategic Information Management Under Leakage in a Supply Chain." Management Science; Mar2009, Vol. 55 Issue 3, p438-452, 15p, anandk@wharton.upenn.edu, mgoyal@rhsmith.umd.edu	2009	25	11447	22	310	25	3.09	6	8	
Green, Robert (2007) "How CFOs Should Tackle Information Management." Financial Executive; Dec2007, Vol. 23 Issue 10, p44-48, 4p	2007	3	1972	2	54	3	2.94	18	9	
Honggeng Zhou Collier, David A.	2008	6	6115	48	72	6	2.75	14	10	
Teevan, Jaime Jones, William (2006) 2Personal Information Management.2 Communications of the ACM; Jan2006, Vol. 49 Issue 1, p40-43, 3p, teevan@csail.mit.edu,	2006	53	1263	3	28	53	2.7	3	11	
Johansson, Eva (2009) "Information management for materials supply systems design." International Journal of Production Research; Apr2009, Vol. 47 Issue 8, p2217-2229, 13p	2009	1	6354	10	141	1	2.58	21	12	
TALLON, PAUL P. (2010), "Understanding the Dynamics of Information Management Costs." Communications of the ACM; May2010, Vol. 53 Issue 5, p121-125, 5p, 1 pptallon@loyola.edu	2010	3	3239	14	54	3	2.53	19	13	
Sprehe, J. Timothy (2008) "Exploring the Information Management Side of RIM." Information Management Journal; May/Jun2008, Vol. 42 Issue 3, p62-67, 4p , jtsprehe@jtsprehe.com	2008	6	2478	15	31	6	2.46	15	14	
Karger, David R. Jones, William(2006) "Data Unification in Personal Information Management." Communications of the ACM; Jan2006, Vol. 49 Issue 1, p77-82, 6p, karger@theory.lcs.mit.edu, williamj@u.washington.edu	2006	55	3032	4	57	55	2.11	2	15	
Whittaker, Steve Bellotti, Victoria	2006	83	2867	3	54	83	2.09	1	16	
Schnetzler, M. J. Schönsleben, P. (2007) "The contribution and role of information management in supply chains: a decomposition-based approach." Production Planning & Control; Sep2007, Vol. 18 Issue 6, p497-513, 17p, mschnetzler@ethz.ch	2007	4	9481	13	146	4	1.81	17	17	
Fallis, D. And Withcomb, D. (2009). "Epistemic Values and Information Management." School of Information Resources and Library Science, University of Arizona, Tucson, Arizona, USA.	2009	6	9839	58	112	6	1.73	16	18	
Gyampoh-Vidogah, Regina Moreton, Robert Proverbs, David (2003), "Implementing information management in construction:	2003	14	6819	53	101	14	1.55	9	19	
Elsweiler, David Ruthven, Ian Jones, Christopher (2007) "Towards memory supporting personal information management tools." Journal of the American Society for Information Science &	2007	27	15221	11	193	27	1.41	5	20	
Pereira, Jorge Verissimo (2009) "The new supply chain's frontier: Information management" International Journal of Information Management; Oct2009, Vol. 29 Issue 5, p372-379, 8p	2009	15	5681	12	45	15	1.21	8	21	
Cornish, Graham P.(2005) "Electronic information management and intellectual property rights." Information Services & Use; 2005, Vol. 25 Issue 1, p59-68, 10p gp- jm.cornish@virgin.net	2005	1	4779	10	27	1	0.98	22	22	

APPENDIX 10

Academic texts, 2000-2010 according to Total Rank and overview of 5 selected texts

Reference	YEAR	SA	OW	IM	I	V1	V2	Rank V1	Rank V2	Total Rank
Choo, C.W., Furness, C.; Paquette, S., van den Berg, H., Detlor, B.; Bergeron, P., Heaton, L. (2006) "Working with information: information management and culture in a professional services organization" Journal of Information Science, 32, 491	2006	28	9903	62	463	28	5.92	4	2	6
Detlor, Brian (2010) "Information management", International Journal of Information Management Apr2010, Vol. 30 Issue 2, p103-108, 6p	2010	12	4818	59	239	12	7.45	10	1	11
Christian Schlögl (2005) "Information and knowledge management: dimensions and approaches" Information Research, Vol 10 No. 4, July 2005	2005	19	4427	56	167	19	3.3	7	6	13
Teevan, Jaime Jones, William (2006) 2Personal Information Management.2 Communications of the ACM; Jan2006, Vol. 49 Issue 1, p40-43, 3p, teevan@csail.mit.edu, williamj@u.washington.edu	2006	53	1263	3	28	53	2.7	3	11	14
Anand, Krishnan S. Goyal, Manu (2009) "Strategic Information Management Under Leakage in a Supply Chain." Management Science; Mar2009, Vol. 55 Issue 3, p438-452, 15p, anandk@wharton.upenn.edu, mgoyal@rhsmith.umd.edu	2009	25	11447	22	310	25	3.09	6	8	14
Nowé, K. (2005) "The IM Research Field in view of a 'rational choice' paradigm and an 'institutional theory' paradigm". Svesk Biblioteksforskning Vol. 15:1	2005	10	4148	39	80	10	3.8	11	3	14
Middelton, M. (2006) "A framework for information management: Using case studies to test application." International Journal of Information Management 27 (2007). 9-11	2006	7	7209	43	180	7	3.69	12	4	16
Whittaker, Steve Bellotti, Victoria Gwizdka, Jacek (2006) "Email in Personal Information Management.# Communications of the ACM; Jan2006, Vol. 49 Issue 1, p68-73, 6p .whittaker@sheffield.ac.uk, belloti@parc.xerox.com, jgwizdka@scils.rutgers.edu	2006	83	2867	3	54	83	2.09	1	16	17
Karger, David R. Jones, William(2006) "Data Unification in Personal Information Management." Communications of the ACM; Jan2006, Vol. 49 Issue 1, p77-82, 6p, karger@theory.lcs.mit.edu, williamj@u.washington.edu	2006	55	3032	4	57	55	2.11	2	15	17
Tonta, Yaşar (2005) "Internet and electronic information management." Information Services & Use; 2005, Vol. 25 Issue 1, p3-12, 10p tonta@hacettepe.edu.tr	2005	7	4704	12	139	7	3.45	13	5	18
Honggeng Zhou Collier, David A. Wilson, Darryl D. (2008) "The relationship of strategic business alignment and enterprise information management in achieving better business performance." Enterprise Information Systems; May2008, Vol. 2 Issue 2, p201-220, 20p, 1 , Honggeng.zhou@unh.edu	2008	6	6115	48	72	6	2.75	14	10	24
Elsweiler, David Ruthven, Ian Jones, Christopher (2007) "Towards memory supporting personal information management tools." Journal of the American Society for Information Science & Technology; May2007, Vol. 58 Issue 7, p924-946, 23p, david.elsweiler@cis.strath.ac.uk, ian.ruthven@cis.strath.ac.uk, cjones@cis.strath.ac.uk	2007	27	15221	11	193	27	1.41	5	20	25
Green, Robert (2007) "How CFOs Should Tackle Information Management." Financial Executive; Dec2007, Vol. 23 Issue 10, p44-48, 4p	2007	3	1972	2	54	3	2.94	18	9	27
Smith, Heather A. McKeen, James D.(2007) "DEVELOPMENTS IN PRACTICE XXIV: INFORMATION MANAGEMENT: THE NEXUS OF BUSINESS AND IT." Communications of AIS; 2007, Vol. 2007 Issue 19, p34-46, 13p, jmckeen@business.queensu.ca	2007	2	6008	19	151	2	3.14	20	7	27
Gyampoh-Vidogah, Regina Moreton, Robert Proverbs, David (2003), "Implementing information management in construction: establishing problems, concepts and practice." Construction Innovation (Sage Publications, Ltd.); Sep2003, Vol. 3 Issue 3, p157-173, 17p	2003	14	6819	53	101	14	1.55	9	19	28
Pereira, Jorge Verissimo (2009) "The new supply chain's frontier: Information management" International Journal of Information Management; Oct2009, Vol. 29 Issue 5, p372-379, 8p	2009	15	5681	12	45	15	1.21	8	21	29
Sprehe, J. Timothy (2008) "Exploring the Information Management Side of RIM." Information Management Journal; May/Jun2008, Vol. 42 Issue 3, p62-67, 4p , jtsprehe@jtsprehe.com	2008	6	2478	15	31	6	2.46	15	14	29
TALLON, PAUL P. (2010), "Understanding the Dynamics of Information Management Costs." Communications of the ACM; May2010, Vol. 53 Issue 5, p121-125, 5p, 1 pptallon@loyola.edu	2010	3	3239	14	54	3	2.53	19	13	32
Johansson, Eva (2009) "Information management for materials supply systems design." International Journal of Production Research; Apr2009, Vol. 47 Issue 8, p2217-2229, 13p	2009	1	6354	10	141	1	2.58	21	12	33
Fallis, D. And Withcomb, D. (2009). "Epistemic Values and Information Management." School of Information Resources and Library Science, University of Arizona, Tucson, Arizona, USA.	2009	6	9839	58	112	6	1.73	16	18	34
Schnetzler, M. J. Schönsleben, P. (2007) "The contribution and role of information management in supply chains: a decomposition-based approach." Production Planning & Control; Sep2007, Vol. 18 Issue 6, p497-513, 17p, mschnetzler@ethz.ch	2007	4	9481	13	146	4	1.81	17	17	34
Cornish, Graham P.(2005) "Electronic information management and intellectual property rights." Information Services & Use; 2005, Vol. 25 Issue 1, p59-68, 10p gp-jm.cornish@virgin.net	2005	1	4779	10	27	1	0.98	22	22	44

APPENDIX 10A

Schlögl, C. (2005), *Information and knowledge management: dimensions and approaches*, Information Research, Vol. 10, No. 4, pp. 1-15

OW=4427	I= 167	IM= 56	SA= 19	*Position: 1990-1999, text no. 1*

Introduction. Though literature on information and knowledge management is vast, there is much confusion concerning the meaning of these terms. Hence, this article should give some orientation and work out the main aspects of information and knowledge management.
Method. An author co-citation analysis, which identified the main dimensions of information management, forms the basis of the study of literature. In it, the main aspects of information management are further refined. Furthermore, it will be investigated if the concept of knowledge management adds anything to information management, and if so what it is.
Analysis. Data for analysis were retrieved from Science Citation Index and Social Science Citation Index. Though the literature review is based on the quantitative results of thebibliometric analysis and has tried to consider the most prominent publications, some degree of subjectivism cannot be excluded.
Results. As a result of analysis, a distinction can be made between content and technologyoriented information management approaches. According to the literature review, technology-oriented information management includes data management, information technology management and strategic information technology management. The main emphasis of these approaches is the effective and efficient use of information technology. In contrast, content-oriented approaches focus on information and its use. They can bedistinguished in records management, provision of external information, human-centered information management, and information resources management. The reading of the literature on knowledge management reveals, that this term is either used synonymously for information management or for the management of work practices with the goal of improving the generation of new knowledge and the sharing of existing knowledge.
Conclusions. This article identifies various aspects that are embraced by the terms information management and knowledge management. Thus, it should contribute to more terminological clarity and finally improve communication both in science and in

Context – drawn from references

Knowledge Management: pp. 11-14, ref. to: (1)Al-Hawamdeh, S.(2002), Knoeledge Management: re-thinking information management and facing the challenge of managing tacit knowledge. (5)Broadbent, M(1998), The phenomenonof knowledge management: what does it mean to the information profession? (8)Corrall, S.(1998), Knowledge management: are we in the knowledge management business? (11)Davenport, T.H., De Long, D.W. & Beers, M.C.(1998), Successful knowledge management projects. (50)Morrow, N.M.(2001)Knowledge Management:and introduction. (57)Ponzi, L. & Koenig, M.(2002), Knowledge management: another management fad?
Information Management: pp.11-14, ref. to: (16)English, L.P.(1996), Redefining information management.
Information Resources management: pp. 11-14, ref. to: (4)Bergeron, P.(1996), Information resources management, (35)Levitan, K.B.(1982), Information Resource(s) Management- information resources management. (38)Lytle, R.H.(1986), Information resource management, (39) Lytle, R.H.(1988), Information resource management: a five-year perspective.

Themes, topics and concepts

- Understanding of Information Management as field
- Content-oriented Information management
- Technology-oriented information management
- Knowledge management
- Multidisciplinary information management

APPENDIX 10B

Choo, C.W., Furness, P.S., Van den Berg, H., Detlor, B., Bergeron, P., Heaton, L. (2006), *Working with information: information management and culture in a professional services organization*, Journal of Information Science, Vol. 32, Issue 6, pp. 491-510

OW=9903	I= 463	IM= 62	SA= 28	*Position: 1990-1999, text no. 2*

Abstract
The paper presents a case study of a large Canadian law firm with a distinctive information culture that is vigorously implementing an information management strategy. Our findings suggest that, at least for this organization, information culture trumps information management in its impact on information use outcomes.
Thus, the strongly held information values and behaviors in the firm accounted for more than onethird of the variance in information use outcomes. Employees did perceive a high level of information management activity in the firm, although information management played a smaller, perhaps indirect role in explaining information use outcomes. What might organizations do to improve information use? This study suggests that organizations might do well to recognize that, in the hustle and bustle to implement strategies and systems, information values and information culture will always have a defining influence on how people share and use information.

Keywords: information management; information culture; information use outcomes

Context – drawn from references
Intelligent organization and Intellectual capital: pp. 509-510: (4)Choo, C.W.(2002), Information Management for the intelligent organization: The art of scanning the environment. (14)Choo, C.W. and Bontis, N.(2002), The Strategic Management of Intellectual Capital and Organizational Knowledge. (15)Roos, J., Roos, G., and Dragonetti, N.C. (1998), Intellectual Capital: Navigating in the New Business Landscape. (17)Widen-Wulff, G. and Ginman, M. (2004), Explaining knowledge sharing in organizations through the dimensions of social capital.
Human-information interaction: pp.. 509-510: (6)Fidel, R., Pejtersen, A., Cleal, B, and Bruce, H(2004), A multidimensional approach to the study of human – information interaction: a case study of collaborative information retrieval.
Information ecology; pp.509-510: (11)Davenport, T.H.(1997), Information Ecology: Mastering the information and knowledge environment
Knowledge management: pp. 509-510, ref. to: (12)Blair, D.C.(2002), Knowledge management; hype, hope or help? (13)Southon, F.C.G., Todd, R.J. and Seneque,M.(2002), Knowledge Management in three organizations: and exploratory study. (27)Statistics Canada(2001), Knowledge Management Practices Survey.
Information behavior: pp. 509-510, ref. to: (20)Case, D.O.(2002), Looking for Infromation: A survey of research on information seeking, needs, and behavior. (21)Fisher, K.E., Erdeles, S. and McKechnie, L.(2005), Theories of information behavior.

Themes, topics and concepts
- Information Management
- Information Management Tacit (IMT)
- Information Management Explicit (IME)
- Information Use (outcomes)
- Information Culture

APPENDIX 10C

Teevan, J., Jones, W. (2006), *Personal Information Management,* Communication of the ACM, Vol. 49, No. 1, pp. 40-43

OW=1263	I= 28	IM= 3	SA= 53	*Position: 2000-2010, text no. 3*

Introduction
Cheap and fast search and storage technologies help bring order to our messy personal information environments, freeing us to make the most of our information collections.

Context – drawn from references
Personal Information Management: p.43, ref. to: (3)Jones, W.(2005), A Review of Personal Information Management
Psychology: p.43 ref to: (4)Lansdale, M.(1988), The psychology of personal information management

Themes, topics and concepts
- Personal Information Management
- Cognitive psychology
- Human-Computer interaction
- Database management
- Information Retrieval
- Library and information science
- Increased digitalization of information
- Information fragmentation

APPENDIX 10D

Anand, K.S., Goyal, M. (2009), *Strategic Information Management Under Leakage in a Supply Chain,* Academy of Management Review, Vol. 55, No. 3, pp. 438-452

OW=11447	I= 310	IM= 22	SA= 25	*Position: 2000-2010, text no. 4*

Abstract
The importance of material flow management for a profit-maximizing firm has been well articulated in the
supply chain literature. We demonstrate in our analytical model that a firm must also actively manage information flows within the supply chain, which translates to controlling what it knows, as well as what its competitors and suppliers know. In our model of horizontal competition between an informed and an uninformed firm with a common upstream supplier, material and information flows intersect through leakage of demand (order) information to unintended recipients. As a result, the informed firm's drive to control information flows within the supply chain can trigger operational losses through material flow distortion. These losses can be so severe that the firm may prefer not to acquire information even when it is costless to do so. Our results underscore the importance of strategic information management—actively managing the supply chain's information flows, and making trade-offs with material flows where appropriate, to maximize profits.

Key words: application contexts/sectors; supply chain and logistics; competitive impacts of IS; economics of IS; manufacturing; strategy

Context – drawn from references
Supply-Chain: p. 452, ref to: (6) Cachon, G.(2003), Supply chain coordination with contracts. (7)Cachon, G.P., Laviere, M.(2001) Contracting to assure supply: How to share demand forecasts in a supply chain. (8)Chen, F.(2003), Information Sharing and supply chain coordination. (31)Li, L.(2002), Information Sharing in a supply-chain with horizontal competition (32) Li, L., Zang, H.(2007), Confidentiality and information sharing in supply chain coordination. (44)Zang, H.(2002), Vertical information exchange in a supply chain.(28)Lee, H. and Whang, S.(200), Information sharing in a supply chain. (20)Gavirneni, S(2002), Information flows in capacitated supply chans with fixed ordering costs.
Equilibrium (economics): p. 452, ref. to: (9)Cho, I.K.Kreps, D.M.(2001), Signalling games and stable equilibrium. (12) Daugherthy, A., Reingaum, J.(1994), Asymmetric information acquisition and behavior in role choice models: An edogeneously generated signalling game. (17)Fudenberg, D. and Tirole, J. (1991b), Perfect Bayesian equilibrium and sequential equilibrium. (26)Kreps, D.M., Wilson, R. (1982), Sequential equilibria. (34)Milgrom, P., Roberts, J.(1982)m Limit pricing and entry uner incomplete information. (43)Vives, X. (1984), Duopoly information equilibrium: Cournot and Bertrand.
Oligopoly: p. 452, ref. to: (18)Gal-or, E.(1985), Information sharing in oligopoly. (37)Raith, M.(1996), A general model of information sharing in oligopoly. (39)Shapiro, C.(1986), Exchange of cost information in oligopoly. (47)Ziv, A.(1993), Information sharing in oligopoly.

Themes, topics and concepts
- Information Leakage
- Informational Imperatives
- Operational Imperatives
- Strategic information management
- Information asymmetry
- Information acquisition game
- Information dissemination game
- Supply chain

APPENDIX 10E

Detlor, B. (2010), *Information Management*, International Journal of Information Management, Vol.30, pp.103-108

OW=4818	I= 239	IM= 59	SA= 12	*Position: 2000-2010, text no. 5*

Abstract
Information management concerns the control over how information is created, acquired, organized, stored, distributed, and used as a means of promoting, efficient and effective information access, processing, and use by people and organizations. Various perspectives of information management exist. In this paper, three are presented: the organizational, library and personal perspectives. Each deals with the management of some or all of the processes involved in the information lifecycle. Each concerns itself with the management of different types of information resources. The purpose of this paper is to clearly describe what, "information management" is and to clarify how information management differs in regards to closely related terms.

Context – drawn from references
Information Management and organizational knowledge: pp.107-108, ref. to: (2)Organization of knowledge, (9)Choo, C.W.(2002)Information Management for the intelligent organization (8)Choo, C.W.(1991), Towards an informational model of organizations (18)Galbraith, J.R.(1977), Organization design.
Collective Management: pp. 107-108, ref to: (6)Branin, J., Groen, F. & Thorin, S.(2000)The changing nature of collection management in research libraries.
Personal Information Management: pp.107-108, ref. to: (4)Barreau, D. (2008), The persistance of behavior and form in the organization of personal information. (23)Jones, W.(2008), Keeping found things found,: The study and practice of personal information management and the role of information and knowledge managers: The malaysian perspective. (25)Landsale, M.(1988), The psychology of personal information management
Strategic Information Management: pp. 107-108, ref. to: (8)McGee, J.V. and Prusak, L. (1993), Managing information strategically.
Information Science: pp. 107-108, ref. to: (33)Sreenivasulu, V.(2000), he role of a digital libriarian in the management of digital information systems.

Themes, topics and concepts
- What is information management
- What is the goal of information management
- Organizational perspective on information management
- The library perspective on information management
- The personal perspective on information management
- Processes of information management: creation, acquisition, organization, storage, distribution and usage of information

APPENDIX 11

Platon – Information Management Consultants

The first company chosen is a Danish consultancy company, named Platon, specializing in providing Information Management services (Platon, 1999). The company has existed since 1999 by a group of consultants highly interested in the increasing need for Data Warehouse solutions (Platon, 1999). Since then the company has grown more into the market for information management and have provided services to large companies such as, Bestseller, Bang & Olufsen, JYSK, Carlsberg and many more (Platon, 1999).

Website:

www.platon.dk

IN ANCIENT ATHENS THE PHILOSOPHER PLATON (PLATO) ADVOCATED THAT A SOCIETY'S PROGRESS WAS CONDITIONAL UPON INCREASED INSIGHT OF ITS CITIZENS.

HE ACTUALLY BELIEVED INSIGHT TO BE A PRECONDITION TO PARTICIPATION IN A DEMOCRACY. IF THIS PHILOSOPHY IS TO BE APPLIED TO TODAY'S BUSINESSES, THIS MEANS THAT BUSINESS INSIGHT IS A PRECONDITION TO RATIONAL DECISIONS IN ALL LEVELS OF THE ORGANIZATION. INSIGHT IS BASED ON ACCESS TO DATA, INFORMATION AND KNOWLEDGE. THE ABILITY TO USE AND SHARE SUCH RESOURCES WILL BE OF INCREASING IMPORTANCE COMPETITIVELY IN TODAY'S INFORMATION AND KNOWLEDGE SOCIETY.

MANAGERS SHOULD, THEREFORE, PAY ATTENTION TO DATA, INFORMATION AND KNOWLEDGE ON EQUAL TERMS WITH RESOURCES SUCH AS MACHINES, EMPLOYEES, BUILDINGS AND CAPITAL. CONSEQUENTLY, OUR MISSION IS TO SUPPORT OUR CLIENTS' BUSINESS PROCESSES THROUGH SOLUTIONS FOR COLLECTING, STRUCTURING AND APPLYING DATA, INFORMATION AND KNOWLEDGE.

PLATON

INFORMATION AS A STRATEGIC ASSET

Information is one of the most enduring and valuable assets in many companies and yet it is rarely managed as such. Companies manage assets across numerous organizational units such as HR, Finance, Inventory and IT. This is often a source of competitive advantage. The Information assets, however, often fall somewhere between business and IT, with no one person responsible for ensuring that the value of information is leveraged. Paradoxically, most organisations understand the value of good information or at least, are dependent upon it. For more than a decade, Business Intelligence (BI) has been used to help organisations answer business questions, and forecast, based on historical Information.

However, BI is no longer enough. Market conditions have changed and put even greater pressure on businesses. Compliance, regulations, competition, mergers and acquisitions, new product launches etc., makes readily available information even more crucial.

Information is everywhere, in all business processes, and across all business units. Try to think of it this way - information is the product of most processes in your company. Consider the business processes when you have a customer interaction, when you manufacture a product, when you send an invoice or when you pay salaries to your employees; they all create valuable information.

Imagine if that information was readily available for everyone who needed it, wherever and whenever they needed it, and in the right form and quality. This is the primary objective of Information Management, and this is what Platon has built unique competencies and experiences in, with the aim of helping clients gain value from their own information.

"There is little doubt that information is a potential strategic asset in almost all corporations – and that it is rarely managed as such. As the pressures of the information age increase, we predict a critical need for corporations to increase their maturity in Information Management. However the journey from today's world of poor data quality and fragmented Business Intelligence solutions towards enterprise Information Management is a complex one. At Platon we have dedicated our efforts into helping our clients make this journey."

MICHAEL BORGES,
CEO - CHIEF EXECUTIVE OFFICER

"Putting the I back in IT®"

THE OFFERINGS

Platon has extensive experience in Information Management in terms of both advisory and implementation services.

We cover the full program and project life cycles, from initial strategy formulation through program management, building organizational skills, defining enterprise architecture, evaluating technologies, as well as project activities including analysis, design, development and implementation. These services are provided across all the disciplines of Information Management including Business Intelligence, Data Warehousing, Master Data Management, Meta Data Management, Data Integration, Information Life Cycle Management.

SOLUTION DOMAINS

Business Intelligence (BI)
The term Business Intelligence covers the use of structured information to derive business insight. It enables improved decision making by providing information in the right form, of the right quality, at the right time. The purpose is to identify threats and opportunities and initiate actions to address them. This can be done by reporting/analysing historic information and planning/simulating future scenarios. Business Intelligence supports different management processes such as Performance Management, Customer Relationship Management, Risk Management, Quality Management and Resource Management.

Data Warehouse (DW)
The term Data Warehouse relates to the management of data, as opposed to Business Intelligence, which focuses on the usage of data. The purpose of Data Warehousing is to provide integrated, consistent, structured, correct and timely data for any system or user that requires it. Data are extracted from operational systems and integrated in the Data Warehouse environment in order to provide an enterprise wide perspective – one version of the truth.

Master Data Management (MDM)
Master Data can be defined as key data about business entities that are used across business processes. Some classic Master Data examples are customers, products, suppliers, employees, locations and accounts. Platon defines MDM as the "structured management of Master Data in terms of definitions, governance, architecture, technology and processes".

MDM is about
- Having an enterprise focus on data quality
- Having common business definitions (Meta Data) for Master Data
- Ensuring adequate Master Data to support business processes
- Securing business driven Data Governance and accountability for data quality
- Ensuring appropriate maintenance processes around Master Data
- Ensuring integration of Master Data across the system landscape

MDM involves the entire system landscape including all operational and analytical systems where Master Data are used, created, updated or deleted.

Information Lifecycle Management (ILM)
Organisations are increasingly feeling the pain of *uncontrollable growth of data.* Users are producing documents, e-mails and other unstructured and semi-structured data to the degree that experts speak about a volume explosion. This results in both increased storage costs and increased operational risk considering the growing regulation on information from government and other authorities. Through Information Lifecycle Management, organisations can better manage their information by understanding the types of data stored, its usage, and its growth rate in terms of volume. Based on this insight, it is possible to optimise storage investments and develop relevant policies on information storage, security and privacy.

"Putting the I back in IT®"

SERVICES

Advisory
Businesses often find it difficult to manage their Information Management (IM) initiatives. The value of IM Projects is often not realised due to poorly understood business processes or lack of business engagement and support.

Platon provides strategic and tactical advisory services in IM in order to bridge the gap between business strategies and IT solutions. This creates business value, promotes the idea of information as a strategic asset and leverages available information to realise overall business goals.

This is achieved through a number of discrete IM services which can ensure long term and structured support of the business. This also includes maturity assessments, strategy development, business requirement analysis, and pain point identification. Organizational setup, policies and standards as well as architecture are often more important than selection of technology, so we place significant emphasis on these structures e.g. by designing and training organizations and coaching CIOs, IM/BI managers and business executives in the area of IM.

Implementation
Once the IM program has been established, the IM solutions are implemented. This requires architectural and technical skills across various disciplines and technologies in order to ensure success. Platon provides implementation services to deliver the individual projects all the way from the initial analysis through design, development, implementation and passing projects into production.

Through many IM projects over the years Platon consultants have gained unique knowledge in the disciplines and technologies surrounding the project implementations. The technology skills span all major platforms, and Platon consultants possess skills from all the leading technology vendors in the IM market such as Informatica, IBM, Microsoft, MicroStrategy, Oracle, SAP and Teradata.

Training
The Platon Academy offers training in all IM related disciplines. The training classes can be provided both as standard on-site training as well as customized training classes off-site upon request. The list of courses is comprehensive and includes ones that will introduce clients to concepts such as BI and MDM, various modelling techniques and other best-practices

SOLUTION ACCELERATORS

Platon has developed a number of solution accelerators to enable success in client projects based on best-practices. The solution accelerators are available as commercial offerings to the clients, if they wish to use Platon resources to transfer and build skills internally based on Platon's experiences.

Platon Insight®
Platon has spent significant resources on creating a knowledge framework based on experiences and best-practices to help you establish a program in your organization for leveraging information as a strategic asset. This knowledge framework is called Platon Insight®, and is based on experience gained by establishing programs and implementing approximately 750 projects within the area of Information Management. The key benefits to the clients are faster and better implementation of IM projects.

Platon InSense™
Platon has developed an Information Lifecycle Management Analysis Service (Platon InSense™) that enables clients to analyse their storage environments. With Platon InSense™ clients are able to use a factual basis for managing information according to business value. It offers huge potential for optimizing storage costs and usage as well as compliance to information policies or legislation. The reporting from Platon InSense™ can be customized to match the clients ILM strategies, policies and other specific business needs.

Meta Framework
Platon's Meta Framework supports and facilitates a structured Data Warehouse development process. The Accelerator is a High-level Meta driven approach to gain development speed, model stability and entity definitions. The accelerator is built using standard (SQL Server based) T-SQL to ensure portability to other platforms and to support individual extensibility. A standard set of procedures is provided to build, maintain and load the data warehouse and gives best-practices in every aspect of the Data Warehouse lifecycle, including automatic generation of keys, indexes and foreign keys.

"Putting the I back in IT®"

PLATON THE COMPANY

The company was founded in Denmark in 1999 by a small group of consultants with a great belief in a growing need in the market for Data Warehousing solutions. It grew organically, with successful results from day one to become a market leader in the Information Management space, and this whilst keeping the strategic cornerstones that laid the foundation for the success:

- **Independence**. Platon has, since day one, been 100% vendor agnostic and has made a virtue of staying independent. We believe that you cannot be objective without also being independent and it is always in our client's interest that we are objective.

- **Focus** – on Information Management. The focus started out on Data Warehouse and naturally evolved to Business Intelligence and thereafter to IM. It's crucial to stay focused if you want to be the best.

- Hiring the **best professionals** in the industry. We believe that each individual must add significant value from day one to the clients in order to differentiate Platon from its competitors. Our consultants represents a wealth of knowledge and many years of practical working experience across all lines of business both from the consulting side but also from the client side.

- Dedicated to **knowledge sharing**. We believe in people who wish to learn and share in order to ensure that the total knowledge in the company exceeds the knowledge of the sum of the individuals in the company. This philosophy has resulted in the development of Platon Insight® - our knowledge framework for IM.

The declared mission of the company is "To support our clients in managing and exploiting Information as a strategic asset through consulting services based on a comprehensive Information Management methodology".

The company is fully owned by employees, resulting in a strong focus on building the *right* business through strategic initiatives as opposed to simply focusing on the financial performance of the company.

Platon has good relationships with all major vendors in the market for IM such as IBM, Microsoft, HP, Oracle and SAP, as well as all the leading specialist players within the various technology domains. These relationships, combined with the part of our business that is organized around specific technologies, ensure that we are constantly up to date with regards to knowledge of the market and the evolving technologies, along with the opportunities it creates for our clients.

THE CLIENTS

Platon has delivered more than 750 Information Management projects for more than 300 clients. These clients represent all the major industries such as Banking, Telecommunications, Pharmaceuticals, Manufacturing, Retail and Public. Even though all these different industries operate very different businesses we find that there are great similarities in the challenges and good synergy effects can be gained across the industries.

A Global Leading Dairy Producer
The company had, due to acquisitions and mergers, ended up with over 30 systems in 8 divisions. A program was initiated to simplify, optimize and integrate the company to function as one global enterprise. According to this strategy, the IT systems, data and work processes were integrated to create a common business and realize synergistic gains. The program turned out to be the largest business project in the company's history. In the reporting environment, there were no less than 30 different standalone Data Warehouses, with well over 280 different overlying reporting solutions. After the consolidating reporting and analysis project had been completed, all of them were replaced by a common Enterprise Data Warehouse and Business Intelligence system for the entire group.

Mortgage Institution
A Foundation owned mortgage credit institution with focus on creating share-holder value through high solvency ratio and focus on risk management, managed to implement a comprehensive Data Warehouse in just one year which formed the basis for the businesses Basel II upgrade. They consolidated many data sources and aligned business processes based on best practices to support risk management at the company. This resulted in a cost effective decentralized solution that was fully documented to support further implementation.

Pharmaceutical Giant and Market leader
The Company measures its insulin operations in the tiniest detail, and to support operations has created an extremely user-friendly Business Intelligence environment. The new consolidated solution brings all the information from 68 different countries, enabling quick strategic decisions to be made with regards to controlling operations, which is absolutely critical for their success.

Postal Service
Created business value through agility and improved insight by implementing a near real-time Data Warehouse solution to optimize the supply chain and feed business critical decision applications. The near real-time solution enables them to optimize the distribution centres, understand their customers better and has created transparency within the organization.

THE PLATON STRATEGY

Platon has through the past couple of years executed on a plan for bringing the success of Platon Denmark to an international level in a global organization. In order to support this strategic objective we have developed and implemented a unique business model, which is based on a joint venture concept that allows the best skilled Information Management professionals in the various countries to partner up with Platon.

An overall vision was announced "to become a recognized global leader in Information Management by creating and supporting a collaborating associated group of outstanding regional consulting companies". The vision and strategy has been evaluated and tested with numerous market influencers whom all find it a unique and very compelling plan, which has already proven its worth through successful international expansion.

We are thought leaders who wish to establish and maintain the global standards for working with Information Management and we want our clients, partners and market visionaries to participate in this best-practice development.

APPENDIX 12

Capgemini – Business Information Management department

The second company, Capgemini, has Information Management as a part of their services, it is thus not the object of the business but has its own are within the company service profile (Capgemini, Capgemini.com, 2011). Capgemini is global enterprise and operates in 40 countries and employs approximately 115.000 people in North America and Europe (Capgemini, Capgemini.com, 2011). The Company has a Business Information Management department that is found under the Technology Services umbrella and promotes itself on creating better intelligence for smarter solutions (Capgemini, Capgemini.com, 2011).

Website:

www.dk.capgemini.com/services-and-solutions/technology/business-information-management

Capgemini CONSULTING.TECHNOLOGY.OUTSOURCING People matter, results count.

Søg OK

Business Information Management

Træf intelligente beslutninger med Business Information Management!

Information er et af dine mest værdifulde aktiver. Capgeminis *Business Information Management* services tager sig af hele informations-livscyklussen og sikrer, at din organisation får reel forretningsmæssig værdi fra sine data ressourcer.

Capgemini Business Information Management

Information er et vigtig forretningsaktiv for enhver organisation. At udnytte fordelene ved business intelligence sikrer en hurtigere beslutningsproces, og letter udvælgelse af strategiske investeringer, som kan give en konkurrencefordel.Capgeminis Business Information Management (BIM) tjenester kombinerer vores konsulentydelser med førende teknologi som kan transformere vores kunders informationsstrategi.

Hvad er Business Information Management?

Forestil dig, at det er året 1610 og du er flåderådgiver for Hollandsk Ost-Indiske Kompagni. Du bliver bedt om af ledelsen at støtte dem i deres iver efter at skabe klarhed om handelsskibenes ydeevne og hvorledes deres forretning forløber. Det er et svært job at udføre med den information der er tilgængelig. Hvor meget tjener vi? Hvor meget profit har vi? Hvad er vores margin og hvilke produkter importerer/eksporterer vi etc. Man kan også forstille sig, at de skulle træffe andre strategiske beslutninger. Fx på flådestyring. Hvor mange skibe har vi brug for og køber vi store skibe, langsomme, små eller hurtige? Eller vedrørende vores produktportefølje. Skal vi til at købe og/eller sælge salt, peber eller tulipaner? Eller hvad med risikostyringen? Hvad er chancen for, at vi vil løbe ind i pirater langs vejen til Kina eller Indonesien? De datakilder var ofte begrænsede til skibets logbog eller ladningskvitteringer. Denne information kunne samtidig tage måneder eller år at få fat på, da skibene skulle være i havn igen før denne information kunne være tilgængelig. I dag har vi det modsatte problem, hvor vi næsten har ubegrænsede datakilder. Det store spørgsmål er, hvor de relevante oplysninger gemmer sig?

Der er flere udfordringer på rejsen mod at blive en intelligent virksomhed. Man ser mange virksomheder, som har investeret i forskellige Business Intelligence teknologier og produkter men er gået glip af at få den værdi, de forventede, ud af deres investeringer. Det synes væsentligt at de ikke har taget et holistisk syn til Business Information Management. Fx leverede systemerne rapporter uden at få det centrale korrekte data justeret. Så hvad skal virksomheden gøre for at reorganisere for at skabe succes, skære omkostninger, skabe hurtigere adgang til information og blive en informations-ledet virksomhed?

Business Intelligence Management dækker alle aspekter i relation til at udnytte de rigtige informationer korrekt og mere effektivt. Det omfatter både traditionelle Business Intelligence løsninger herunder rapportering, analyse og data warehousing, løsninger til sikring af datakvalitet, stamdata samt løsninger til ustrukturerede oplysninger i portaler og andre samarbejdsløsninger.

Det starter med en to-faset tilgang. I første fase skaber man en informations-strategi. Dette kan gøres, når man forstår værdien af information og hvordan man udnytter den i egen virksomhed. I næste fase skabes en organisation, der ejer informationsstrategien: Et Business Intelligence Competence Center (BICC).

Disse produkter kan du læse mere om under fanen ”Services”.

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Søg OK

Business Information Management

Services

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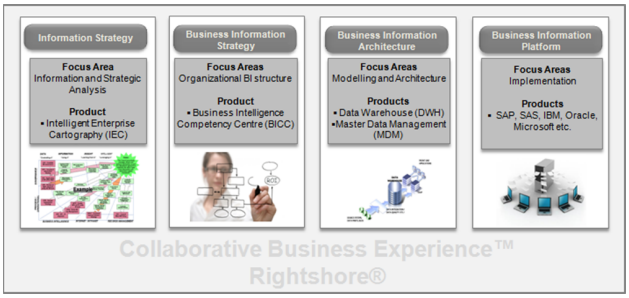
Hvilke services tilbyder vi i Business Information Management?

Billedet nedenfor illustrerer de services som vi i Business Information Management arbejder med. Vi er teknologiuafhængige og tilbyder en bred palette af tjenester for bedre at udnytte håndteringen af information.

Vi har valgt at dele vores services op i 4 områder.



Hvilken værdi vil det have for dig og din virksomhed?

Information management er en afgørende faktor for en organisations effektivitet, præstationer, innovation og i stigende grad en vigtig rolle for IT-strategien.

Vores fokus er på den holistiske forståelse af de behov og muligheder og hvilke løsninger der er nødvendige for hvordan man kan udvikle dem hurtigt og med lav risiko. Vi har en global metodik og stor erfaring med denne type løsninger.

Ikke mindst er vi forpligtet til at skabe en løsning for fremtiden, som i stigende grad fokuserer på nye indsigter og på hvilke handlinger skal udføres, snarere end en løsning, der udelukkende viser historisk information.

Vi kan derfor fra tidligere projekter se, at et Business Intelligence Management projekt i din virksomhed kan føre til:

- Få bedre kontrol af information, interaktion, data vs. omkostninger og kvalitet af data. Alt sammen baseret på mennesker, viden, kultur og infrastruktur
- Få lagt en Business Intelligence strategi
- Bringe IT og forretning sammen
- Kreere analytiske kompetencer for virksomheden som vil forbedre beslutningsprocessen
- Sikre KPI tilpasning i organisationen
- Sikre IT standarder og læring fra tidligere projekter

Vi er en global virksomhed og vores fokus er at levere projekter af høj kvalitet for vores kunder. På dit projekt bruger vi derfor de bedste ressourcer vi har i hele Capgemini Gruppen - i Danmark såvel som internationalt gennem vores arbejdsmetoder som hedder Collaborative Business Experience™ og Rightshore®.