

Information Management: A Treatise on the Resuscitation of a Zombie

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1. Information Management: A Living Dead?

What is information management depends on who it is that asks the question, and who answers it. From such esoteric definitions as “knowledge is a fundamental unity akin to God’s oneness” (**Chadury, 1999**) to a post-modernist definition of information management (**McBride, Lander and McRobb, 1997**), Information Management is defined from the point of view of IT professionals, management gurus, librarians, academics, philosophers and economists.

In a previous opinion paper, I discussed the issue of defining information, and came to the conclusion that, depending on the working context in which it was used, the term had more than one definition. Since Information Management deals with managing an item that can be defined in more than one way, it would come as a surprise to have a single, clear-cut definition of the term.

I have to note here that, despite the huge amount of literature defining terms such as “information”, “knowledge” and “data”, many recent writers on Information Management slip comfortably between the terms, using them haphazardly according to pragmatic need or current fad. For example **Choo (1995)** discusses Information Management in terms of managing knowledge.

It is my opinion that Information Management is as old as writing, if not older [see **Berreby (1999)** on current knowledge workers compared to hunter-gatherers]. Information (knowledge) has always been a powerful tool, manipulated to the advantage of those who had it, withheld from those who could benefit from it. From the Alexandrine Library to the Library of Congress, history has been strewn with records, manuscripts, parchments, folios, books, CD-ROMs and microfiches. What has changed is the technology of management, the ease of access, and the job title. And yet, despite these great advances, the majority of the human population is still either completely ignorant (by force or choice), or seriously mis-informed.

I propose in this paper to discuss the fact that “information management” is a “living-dead”: misunderstood by business managers, kidnapped by IT professionals, and finally re-invented by management gurus (and librarians in the guise thereof) as the “new thing”, a.k.a. Knowledge Management. Information Management is valiantly defended by a diminishing number of professionals, in whose survival interest it is that the subject be resuscitated and given a new lease on life. The general economic and business environment, however, is far from ready to understand and adapt its fundamental principles. And so, Information Management remains, in different guises, the much talked-of zombie.

This paper limits itself to discussing the status of Information Management as it applies to the Australian context, and in way attempts a sweeping generalisation of the issue. The approach espoused in this paper is that of information management from a library/business point of view.

2. Kidnapped by IT, Vulgarised by Business

The 20th century has seen an unprecedented revolution in information creation. This led to such unpleasant side effects as “information explosion” and “information overload”. The fact that these

side effects exist makes one ask if we are not perchance suffering from Information Mismanagement. The public is under the misguided impression that a new "killer application", another "free-text, natural language" search engine or another portal will solve this problem of overload (see, for example, the hype generated on the pages of the otherwise great e-zine CIO: http://www.cio.com/sponsors/0600_km/). What is being ignored is the fact that information is created, manipulated, stored, disseminated and used by human beings, not computers. In an age where the PC is seen as a member of the team, not a tool, information management is being kidnapped by motherboards speaking in Unicode and ASCII.

Over the past two decades, librarians and traditional information providers found themselves disadvantaged by the erupting IT. Hundreds of dotcoms sprouted, preaching to the world a new gospel of Information Management, one that delegated humans to data-entry, incessant mouse-clicking and keyboard hammering. The tool became the master, and the new IT professionals its priesthood. Australian Government, with its eye on "progress", actively cut funding to libraries, retrenching over the past six years thousands of librarians, library technicians and assistants (Steele, 1996). The funds went, as the myth has it, into IT. Paying lip service to "unlimited access" versus "storehouses of wisdom", the trend was to put everything on-line, onto CD-ROMs and servers. But this, of course, only changed the paper warehousing into electronic one. Information increased, overloaded and exploded. But the number of professionals qualified to filter, analyse and re-structure this explosion into useful knowledge actually decreased. Jobs in Australia are rare, salaries paltry. A qualified Librarian with a Master's degree can hope for a 60K per annum, while an IT graduate with a few years experience in writing software can be paid as high as 100K per annum.

In early nineties, a reaction to this trend set in in the USA (Australia has yet a long way to go). Librarians, seeing their cherished jobs disappearing, re-invented themselves with vigour. Always better versed in the techniques of managing the monster, they started using IT to their own benefit. Job titles were created: "information managers", "information specialists", "information technologists", "information scientists", "information engineers" and "intelligence professionals". The last title always coincided in my mind, for some subconscious reason, with "men in black". With an eye on the corporate money-makers, ephemeral creation such as "Chief Knowledge Officers" and "Information Ecologists" and "Internal Infomediaries" appeared in job advertisements [see Costello (2000)]. Employers responded by degrading the value of these professionals: the latest on this front was a job advertisement in one of Australia's dailies, which required an "information administrator" who "could deal with files, relieve reception and answer the administrative needs of staff members" by making them coffee.

But if employers don't know what they are talking about, that may be forgivable. Even sadder was the confusion experienced by self-styled "Knowledge Manager" who complained to KMIP Mailing List (<http://listserv.uts.edu.au/mailman/listinfo/kmip>) that her co-workers did not appreciate her attempts at keeping them informed (see Appendix, p. 6). As it turned out, her notion of "managing information" was that of a postman who ran amok and downloaded all his mail on some unsuspecting citizen's porch.

IT professionals are actively adding to the confusion. When I once ventured to state that the archaic card catalogue kept by the NSW State Library for nostalgic reasons (they have a great web-based catalogue) was actually an "information system", a friend of mine who is a software engineer strongly disagreed. Information systems, she said, are about hardware and software. Or so at least she has been taught at University. I can't blame her for this mis-conception; only a few weeks ago I gave someone my business card, which states that I am an "information manager". I was immediately asked if I could come over and fix their PC.

3. Servers, Portals and Dumping Grounds

IT definitions of Information Management are neither better than others, nor even creative. What is wrong about them is that they are pervasive, and spring from incorrect premises. IT defines "information" according to **Shannon (1969)**, that is, as a signal. As such, the management of signals can be conveniently relegated to electronic gadgets and supporting software. IT definitions of Information Management are all the rage, but they mainly address collection, storage and transmission. Value-adding, in terms of intelligent analysis and decision-making, is still far beyond the best of Artificial Intelligence systems.

A few of IT-based definitions of 'Information Management' are

- **Braman's (1989)**: information as a resource, therefore information management as IT system;
- **Treolar's (1994)**: *"as an ongoing process with three more or less distinct phases: collection of data, processing it into information and communication"* of information; and
- **SANIT Forum (1997)**: Information Management comprising *"the knowledge, skills, capabilities and attitudes required to conceptualise, plan, create, organise, present, analyse, use and control information processes, models, relationships and content"* using human, financial, technology, time and information resources, with the view of transforming efficiency into effectiveness.

In the majority of definitions Information Management is described as a process, or a cycle of processes by of which information is collected (from search engines), organised (on data-bases), stored (on servers and other electronic memory media), used (by IT savvy technicians), controlled (by giving users permissions of access), disseminated (through e-mail and Instant Messaging, mailing lists, messaging boards and bulletins) and disposed of (deleted?), for the benefit of whatever end-user is named (businesses, corporations, organisations, governments, or the public). This end is attended mostly through "intelligent" use of IT and other (human) resources. Such definitions can be gleaned from (**CIP, 1999**), More often than not, even when the definitions come from other disciplines, the stress on IT is stronger than on the actual theory underlying it (**Greenwood and Leger, 1997**). Even the term 'information systems' has been converted to mean the underlying technological infrastructure (hardware/software) providing a conduit for information flow. They do not include the actual observation of data, nor the decision-making process of how the data should be presented and packaged.

On the other hand, **Strassmann (1996)** and **Butcher & Rowley (1998)** argue that a definition of Information Management should include *all* information processes, not just those which involve IT. Their opinion is, unfortunately, not currently shared by many CEOs, for whom Information Management equals by default IT. Strassmann regards this short-sightedness as the primary reason why computers so often fail to deliver the expected results.

By far the most comprehensive definition of Information Management can be found at FOLDOC (Free On-Line Dictionary of Computing) <http://wombat.doc.ic.ac.uk> :

"Information Management - is the planning, budgeting, control and exploitation of the information resources in an organization. The term encompasses both the information itself and the related aspects such as personnel, finance, marketing, organization and technologies, and systems. Information Managers are responsible for the coordination and integration of a wide range of information handling activities within the organization. These include the formulation of corporate information policy, design, evaluation and integration of effective information systems and services, the exploitation of information technologies for competitive advantage and the integration of internal and external information and data."

The IT industry has generated a whole new vocabulary of “information” terms, all conveniently related to either software or hardware. They invented “data mining”, “content management”, “information logistics” and “information interface”, among many other new ones popping out every few months. **Torsilieri & Lucier (2000)** are correct to say that the whole notion of Information/Knowledge management has been misconstrued by IT providers and consultants who “bungled the execution, and overhyped the promise” to an extent that few people believe in it any more. They are not alone in this bleak opinion. In his book *The Squandered Computer*, **Strassmann (1997)** argues that corporate America's spending spree on IT amounts to an “economic arms race” based on misguided management theories. And Australia, not wanting to look the poor relative, followed suit with a rather similar effect.

The reverberations of IT taking over the role of Information Management are manifold, the most important one being, from the business point of view, that for the large costs they incur they only seem to add to the general information overload. Servers, Intranets and Portals quickly become document dumping grounds, as everyone becomes a web-publisher and OCR allows for more and more material to be electronically stored. Other Information Management issues, not yet addressed adequately, have to do with potential loss of information, legal issues, privacy, corporate sabotage and industrial espionage.

4. Management Gurus Jump the Wagon

In 1995, a book by two respected Japanese scholars turned the subject of Information Management into a marketable entity (**Nonaka & Takeuchi, 1995**). Whether Nonaka knew that his era-making book will give a new lease on life to thousands of information professionals is questionable. However, he started a trend: and from then on every self-respecting business at least paid lip-service to managing its “knowledge assets” even if it did not practice what it preached. As Nonaka’s book became the KM Bible, the flood-gates opened. Journals, hard copy and online, e-zines, mailing lists, consultancies and gurus sprang overnight. And what they were all saying was: Information management is important, and it is about people, not IT. Suddenly, Polanyi – of whom very few businessmen ever heard – became quite the fashion, with his tacit and explicit knowledge. Drucker, Davenport, Melhotra, Sveiby, Strassmann and Saint-Onge (see Appendix 2) are all the rage. Postgraduate degrees in Knowledge Management are on offer. It is librarians, side by side with business management lecturers, who are teaching them. In line with what **Eco (1986)** calls the “American need for more”, businesses first wanted more information, then more quality and now they want more management.

But is Knowledge Management equal to Information Management? Yes, and no. The answer depends, again, on who you are asking. Information Management is a science, rigorous, with a strong theoretical base and long-term academic prestige. Knowledge Management is a new-comer, attempting to be all things to all people. **Choo (1995)** and **Kirk (1999)** equate both terms, slipping comfortably between them. **Grey (1998)** differentiates between the two, stating that “working with documents is IM, working with people is KM” although he admits that much of KM is IM. He also differentiates between the core values of each. For Information Management he names efficiency, timeliness, accuracy, veracity, speed, cost, storage space and retrieval, while for Knowledge Management he names originality, innovation, agility, adaptability, intelligence, learning, meaning, understanding, and negotiation. A similar opinion is expressed by **Corral (1998)**, except that she sees Knowledge Management as something one step ahead of Information Management. There are supporters on both sides of the fence, depending on where one’s loyalties are.

The Knowledge Management issue (whether it be a fad or a real economic trend for the new millennium) has benefited both the libraries sector and the businesses themselves. Where once librarians had little options but the public service or the academia, nowadays for those

entrepreneurial enough there is always a chance in the corporate world. Businesses are slowly coming around, mostly in USA and heavily so in the South East Asia region. In Australia, however, the trend is dragging its feet, mainly because the library industry is still reluctant to move from its entrenched position of custodians to that of interpreters and analysts. Lots of this reluctance has to do with such outdated ideas as “political correctness”. A second reason is that in terms of businesses, Australia is far behind its Asian counterparts when it comes to management theory and practice. The major body interested in Information Management is still the government, and that, in my opinion, is a body which manipulates – therefore mis-manages – information (**Smell, 1994**). As a body, the Commonwealth Government sees Information Management in IT terms, to the point of absurdity (**DOFA, 2000**).

5. Everybody’s Information, Nobody’s Management

This re-invention, with all the attached hype, of the new information professional is mainly one-sided. Lots is written, mainly by librarians, about the dangers of ignoring the human factor and over-spending on IT [see, for example, **Davenport (1998)** and **Cross (2000)**].

It is the perception of the majority of managers that their businesses are, to some degree or other, managing information; if not directly then at least by default (**Bent, 1995**). After all, the words “information”, “information technology”, “knowledge management”, “intellectual asset” and “learning organisation” are on the lips of every management guru, self-made or otherwise. Books are produced by the hundreds. Definitions abound. Majority of business managers (white, Anglo-Saxon, middle aged males) in Australia, however, don’t see eye-to-eye with theoreticians, and that for a number of reasons:

- Firstly, few librarians have the charismatic aura that most gadget-producing, software savvy IT specialists have. Managers both love gadgets and are prone to peer-pressure: new mobiles, new laptops, new applications that allow them to see their shares in three-dimensional graphs coloured according to their mood. These are status symbols – librarians are not. If Company X has a portal, then so must we. It doesn’t matter that neither portal works – what matters is that ours is bigger than that of X.
- Secondly, most managers are more keen on promoting their personal egos than the interest of the company. In their opinion, throwing a few hundred thousand of dollars at a new portal or killer application does more to promote them than spending the money on some non-descript introvert with the kind of degrees they themselves could never aspire to, who quietly produces the same amount of information (and of better quality) than all the company’s software taken together.
- Thirdly, majority of managers in Australia are wary of anything that cannot be quantified, crunched in numbers and displayed on the annual report for share-holders to see. In this mistrust, they are joined by the accounting profession. Databases, bytes, servers and applications have numbers to them – they are clear-cut and understandable, therefore safe. Not so with this ephemeral thing called “information” which can’t be even defined to everybody’s satisfaction.
- Fourthly, IT companies market to business using a deceptive “cost-cutting” terminology: if you buy our application, you “cut costs” on time, paper, storage, and staff. Check out ComputerWorld White Paper on collaboration, sponsored by IDC (**ComputerWorld, 2000**). Paradoxically, each such application costs an arm and a leg, seldomly delivers what it promises, and needs constant (human) technical support. But that is not being advertised. However, this advertising strategy is detrimental to human information managers, as the

general perception of the big bosses is, "if I can find it on a database, why should I be paying you to tell me?"

- Finally, Information Management is about information sharing; something which our individualistic and competitive business environment pays lip service to but actively discourages by promoting a self-centred and egoistic attitude to success. The situation is very different in South East Asian countries, where team-work and knowledge sharing have given companies large competitive advantage over Australian businesses (**Prusak & Matarazzo, 1992**).

Until such time as these issues are resolved, the danger of Information Management increasingly remaining within the confines of IT, and mistook for it, lurks in the Australian business environment. I am hopeful, however, that as the USA businesses see the Asian KM light, Australia will start seeing the reflection. What is needed is a constant academic awareness of issues involving Information Management, and persistent education and marketing to corporate bodies, governments and the public. Information Management, as a science, must adapt to the new information needs of its sponsors. Otherwise, as information revolution, eruption, overload or whatever engulfs us all into oblivion, the only definition fit for Information Management will be "RIP".

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8. Appendix: The Mad Postman Syndrome

Below are two of the many emails sent by one Antonir Anat to the KMIP Mailing List. The first is the initial problem, the second a summary of steps taken by Anat to ratify the problem.

1. "Hi all,

I want to get your opinion about the following subject: We, as Information Specialists and Professionals, have to share knowledge with our clients. It means, that we have to inform them with all the "news" in their areas of interest - books, articles, conferences, relevant links to websites etc. I, in my library, do it all the time: I am very busy with searching after such "news" for my clients - I search the web for relevant information, not only because somebody request me to do so, but because I think that this information is important. Another reason is - of course - to make a good "public relations" to my library, to "market" and "promote" and to "justify" my job in the organization.

The question is: How my clients response to my activity?? Do they really like all this information that I am trying to "feed" them with? Isn't it too much?? I send them at least 1 or 2 e-mails per day, with an information - a new book, a conference somewhere in the world that is relevant, a link to a useful website etc. I regard it as my duty, but - recently I start to hear comments like: "why she do it all the time", "we don't need all this information", "we have a lot of work beside reading those e-mails" etc .It makes me feel very confused - Not "feed" them, is to ignore one of the basic rules of Knowledge Management (which is "knowledge sharing"), send them the information - they complain.

What is your opinion, what is your experience - Please let me know.

Thanks and Best Regards,

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2. "Hi all,

I have got so many requests for summarizing the subject, especially from members of the British SOLO list and from the Australian OPAL list. A few requests came from the American Listserv, from the KMIP list and from the Israeli list.

So, here it comes:

Of course the librarian has to find the best balance between feeding the clients all the time with any kind of information and between not sending news at all. Most of the people who answered me, suggested the idea of creating a sub-library in the company's intranet, and to put there all the information I have - new books, articles, information about conferences etc. - and to update it, let's say, every week. Another idea is to create a file in my computer and to e-mail it every week, or every month to the people, not before I am sure what kind of information every person need, want and interested in. One more way is to create a questionnaire, asking the people for their attitude -

want or not want to get an information. There is a possibility of sending a bulletin, in paper version, every week or month including all the news. If the procedure remains as now, sending many e-mails every day, there is a possibility to add in the end of the message a sentence like: "If you don't want to get any more news, please let the librarian know".

Anyway, most of the people agree with one fact: it is NOT the right way to feed the clients with so many news and e-mails every day. It seems that people don't like to read many messages, especially messages that are not exactly in their areas of interest.

The bottom line, as for me, is that I am about to change the system: I think that the best for my clients is to create a sub-library in the company's intranet and to update the news every week. Thanks again to all of you who answered me and were interested in this subject.

Best Regards,
Anat Antonir