

Knowledge: What is it?

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This, the first of this series of occasional papers on Managing Knowledge, looks at knowledge and its characteristics. Future articles will address some of the issues that arise when we try to manage knowledge, and the related topics of intellectual and social capital, learning, categorising, searching and so on, and will finally suggest a path towards exploiting knowledge for profit.

Introduction

Knowledge is increasingly touted as the replacement for land, labour and capital as the source of competitive advantage. There's a lot of horse manure, to put it delicately, talked about knowledge management, and quite a bit of hype (as measured by the number of conferences and magazines). This has resulted in an unseemly scramble to what I'll call "product redefinition", to be kind to it, as everyone rushes to rename everything from document management through workflow to email systems as "Knowledge Management" systems.

So, if these aren't knowledge management what is managing knowledge about anyway, and what should you do about it?

The best answer is probably to hire a bunch of smart people and get them to talk to one another. And despite the skills shortage that makes it difficult to hire smart people, this last part is far and away the hardest.

But why do I prescribe this solution to managing knowledge?

Well, the first reason is that managing knowledge is not a technology issue. As a rule of thumb, if you spend more than about a third of your budget on technology then you have a technology project.

And, a key thesis; knowledge implies a knower. I shall qualify that statement later, but I propose *pro tem* that we consider the stuff that is stored in books and on computer systems as information and that in peoples' heads as knowledge.

- *Exploiting Knowledge is **not** a technology issue*
- *If you spend more than about one third of your budget on technology then it's a technology project*
- *Knowledge implies a knower; the rest is information*

Knowing and knowledge have implications. Consider the phrase "I read what you wrote and I didn't understand it". You read the words; you understand the information conveyed, but the insight - the importance, implications and potential contained within the message is the stuff of knowledge.

These articles are not about technology, although technology is a key enabler of managing knowledge. (I prefer not to use “knowledge management”; partly because the KM currency has been devalued as described above but also because KM implies that knowledge is a thing that you can manage like a document, rather than something soft and contextual to which you need to apply some people management skill and effort.)

Nor are we are talking rocket science here, although some anonymous scientist at the Jet Propulsion Laboratory, quoted by Davenport and Prusak in their excellent book ‘Working Knowledge’¹ said that even rocket science isn’t that hard anymore!

Managing knowledge isn’t cheap. It’s not about throwing up a few web pages on a cheapo server, or even about a lot of web pages on a lot of expensive tin. I’ll return to the topic of price and value in the knowledge market in a later article, but consider here that there has to be a good reason for doing what you are doing about managing knowledge in the first place, especially because it is going to cost you a lot to do it properly.

This article takes a brief look at the reasons for trying to manage knowledge and has a stab at defining what it is (although two and a half thousand years of epistemology hasn’t got us very far here so I’m not going to claim to know the definitive answer).

What’s changed?



Many companies are moving from being product to know-how companies. ICL is a case in point; it doesn’t make product anymore (hardware or soft); it’s a services company, selling what it knows and what it can do in the market.

Even for product companies (like Chaparral Steel, widely quoted in the business books), knowledge is becoming an essential ingredient of success - at all levels in the organisation. Line workers at Chapparral go to conferences

and try experiments to improve things. On a related point, I was delighted to read some time ago that NEC had replaced the robots in its cell phone factory with humans because, with the need to change product every six months or so, the robots couldn't learn fast enough!

Some things don't change, though; remember the paperless office? In 1975 an office worker consumed less than 100 pounds of paper per year. Now it is more than 200 pounds. Paper not only won't go away but we are using more of it. These things don't change because of the social context to information. This is eloquently discussed in a brilliant book called "The Social Life of Information" by John Seely Brown and Paul Duguid², and is something else that we have to take into account when considering this whole area - and when forecasting the end of paper, organisations, careers, offices or whatever. (Brown and Duguid call this "endism".)

So why bother with managing knowledge? Intuitively, in a knowledge society managing knowledge must be the ultimate application. More concrete answers come from the 2001 MAKE (Most Admired Knowledge Enterprises) report³:

A 40% annual return on assets at A.T. Kearney, compared to average of 18% return; annual productivity improvement 7-30% according to Gartner, a 14.1% average RoI on knowledge initiatives at Ipsos-Reid and a 50% reduction in knowledge worker turnover (Drake Beam Morin). Recruiting and training cost is estimated at \$150K per head.

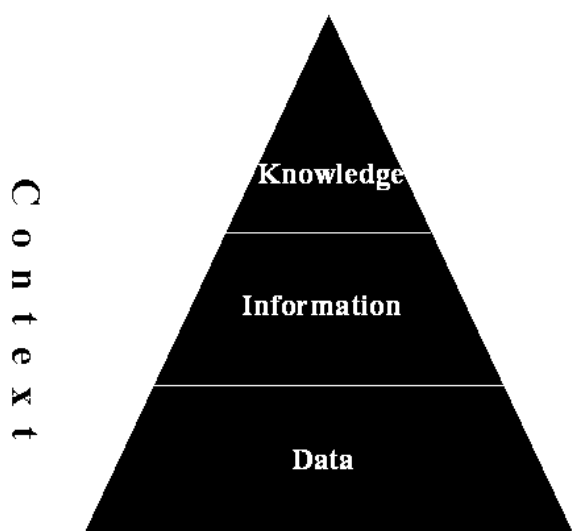
Looking at knowledge loss in more detail, the annual avoidable cost for organisation of 10,000 with a 15% attrition rate is \$225 million! This makes you wonder about downsizing, of course: Dispensing with your most valuable assets - even paying them to go - seems a bit daft as a corporate strategy. It is estimated that GE lost a couple of billion from it's last round of downsizing.

There are many other measures in the literature for the value of knowledge, including one from my colleague, Chris Yapp, who describes the cost of not knowing, or CoNK, a corollary of Philip Crosby's "cost of non-conformance"⁴ from the quality management literature. Whatever you say about the accuracy of any measure of the value of knowledge, and of managing it properly, I think it is worth bearing in mind Leif Edvinsson's advice on the topic: 'being roughly right is better than being precisely wrong,'.

And finally, if KM isn't a much fought-over political football then you can be sure that no one really believes in the value of knowledge, no matter what they say.

What is Knowledge?

So what is knowledge anyway? I don't pretend to have the definitive answer, but we can at least have a go at a simple definition involving the "general purpose marketing diagram".



This can be used to describe most things, for instance Operational systems, Tactical systems and Strategic systems.

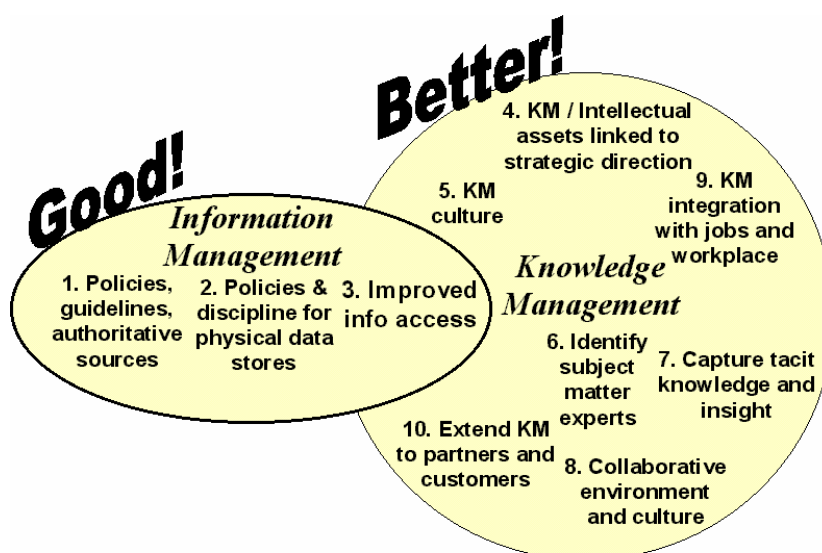
But in this case we'll use the convention that data in context becomes information, and information in context becomes knowledge. It has been said that knowledge in context generates decisions, but I won't go that far.

Wisdom is something else, and is way beyond the scope of this discussion. I'll leave the definition of wisdom to the reader as an exercise. (This always means that I don't know the answer.)

We can be knowledgeable with other men's knowledge, but we cannot be wise with other men's wisdom. Michel de Montaigne

I've put the diagram below at this point with some trepidation, because we haven't yet looked at what we mean by knowledge in any detail. This is the Gartner⁴ view of Knowledge Management as opposed to Information

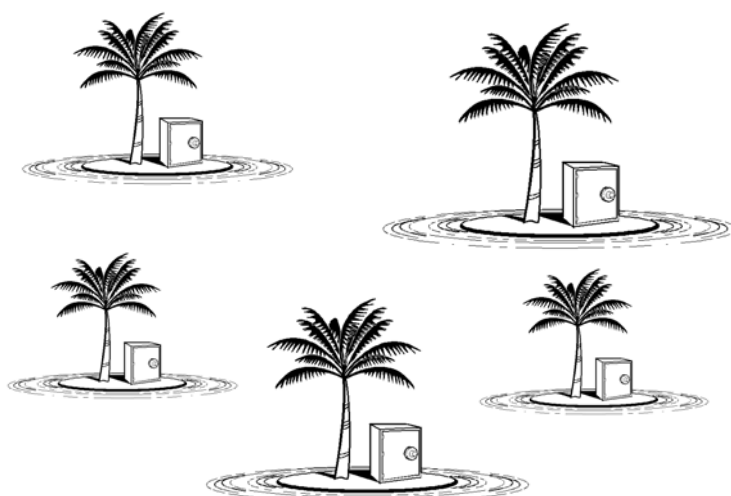
Management. It's a good pointer to some of the additional, softer things that we will need to consider.



Source: Gartner Research

So back to definitions. The definition from 'The Concise Oxford Dictionary' includes such interesting meanings as "sexual intimacy"; hardly a lot of use in our search for enlightenment. But let me assure you that definitions of knowledge are, in fact, the last thing you need.

A cautionary tale



Elizabeth Lank, ICL's first Director, Mobilising Knowledge, used this picture as part of her justification for our intranet, CafeVIK, of which more later. The idea was that there were islands of knowledge that were costing us a fortune in terms of "reinventing the wheel".

Elizabeth was asked to go see the IS manager after her presentation. He was very interested in what she had to say, and in the difference between knowledge and information. When Elizabeth had finished he said that he was glad to know the difference, because Information Management was his baby and so long as she stuck to knowledge there would be no problems. As I said, if it matters it will be political.

A footnote: Elizabeth was telling the story to a colleague. He said that the problem wasn't really the islands; it was the sharks circling in the water!

So don't let's worry too much about the definitions, but here is one that I like:

Knowledge is a fluid mix of framed expertise, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates from and is applied in the minds of knowers. In organisations it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices and norms.

Davenport & Prusak, 1998, Working Knowledge, HBP

This definition, from Davenport and Prusak, touches on many of the things that I want to talk about, mainly things (like framed expertise and values) that you can't hold in a computer (or at least I don't think you can), and the concept of knowledge implying a knower. There is also the concept of context: As Aeschylus said: "Who knows useful things, not many things, is wise."

This definition also allows that knowledge can become embedded in organisations, in their routines, processes, practices and norms. It has been said that individuals don't build oil refineries; organisations do. Whether what actually gets embedded is knowledge, or knowledge assets, or knowledge objects is something to which we'll return in a later article.

References

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