Our take on 'how to talk about Knowledge Management'

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INTRODUCTION

So, the Board's decided your organisation needs to 'do knowledge management' and you've been put in charge. You get the stakeholders together and have a great kick-off meeting. Months down the track you find the IT team designing a database (named the 'Knowledge Base') to store all the knowledge that is going to be captured, a project team has been formed to implement a document management system to solve the problem, and the HR department is engaged in a culture change project to increase knowledge sharing. You realise that everyone at the kick-off meeting had a completely different take on what knowledge management means.

The way we talk about knowledge affects what we do about it. Many KM efforts get bogged down because people have a different understanding of KM. This paper aims to help you get past the point of debating what it is, so you can focus on what to do. We have been involved in KM for many years, and throughout the paper we provide ideas based on our experiences, mixed with references to the people and documents that have influenced our thinking.

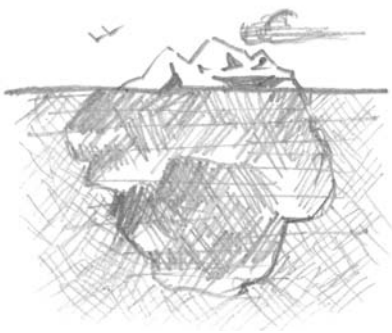
There are lots of different views of KM and it can be confusing. Many software vendors have re-labeled their products as knowledge management regardless of their relevance. Many definitions are tortuous and don't aid understanding or provide clear indicators of what needs to be done. A lot of heat (and very little light) is generated in debating the validity of these definitions and in trying to arrive at a definitive description of the nature of knowledge or the discipline of Knowledge Management.

Our take is that you should start with two simple premises:

- Knowledge is an important resource in achieving organisational (and community) objectives—what you know affects what you do.
- Getting the most from your knowledge resources requires understanding their characteristics. You need to understand enough about the nature of knowledge in the context of your organisation to be able to apply sound management practices.

DIFFERENCE BETWEEN DATA, INFORMATION AND KNOWLEDGE

Data and information are any material that can be digitised. Knowledge is the stuff in people's heads which enables them to do things. Imagine an organisation's knowledge resources as an iceberg. The tip of the iceberg represents data and information. The bulk of the iceberg below the waterline represents the knowledge in people's heads. The water the iceberg is floating in represents the organisational culture—it's all around us and we rarely notice it.



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DATA AND INFORMATION

This paper does not attempt to differentiate between data and information, it refers to them collectively. The visible component of the iceberg is the domain of data and information management. Managing in this domain requires a different set of skills than is required to manage the stuff below the waterline. To illustrate this, consider some of the concepts associated with data and information: search, browse, store, retrieve, organise, tangible, explicit, database, document and record management, folder, metadata, taxonomy, search engine. Data and information have a set of characteristics which are relatively predictable and are thus more amenable to reproducible techniques such as categorisation and to management through policy and procedure. That is not to say that this domain is easy to manage—just relatively predictable. Information is certainly valuable, but it is inert; it does not cause things to happen. As described by Polanyi and Prosch,[1] information (such as a map), no matter how elaborate it is, cannot read itself; it requires the judgement of a skilled reader who will relate the map to the world through both cognitive and sensory means. Debra Amidon, in 1991,[2] asserted that information, in and of itself, is not useful until it is embodied in a person's awareness and related to business imperatives.

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KNOWLEDGE

When we venture below the waterline, into the domain of people and their knowledge, a completely different language is used. This language includes terms such as talk, listen, share, learn, create, discover, dialogue, collaborate, act, choice, relationships, emotion, organic, adaptive, complex and (the big one) trust.

Knowledge is that relatively intangible resource within every individual. The very intangibility of knowledge works against its effective use in many organisations because it does not lend itself to the process-focused and reductionist approaches of industrial-age companies. Less focus is often placed on knowledge than on the more tangible information and data assets of organisations for this very reason. While estimates vary, the proportion of an organisation's knowledge resources residing in the minds of people is probably somewhere between 80% and 99%—the overwhelming majority of an organisation's knowledge resources reside in the heads, hands and hearts of their staff.

Our take is that knowledge should be differentiated from information. It's not an absolute delineation, just a useful model for thinking about the practical issues associated with knowledge management. Another useful concept was described by Luke Naismith in 2005. He said, "You can't do knowledge management until you accept that you can't manage knowledge".

CULTURE

At the risk of clouding the issue a little, we should briefly cover the issue of culture, which can be viewed simply as 'the way we do things around here'. Just as a fish doesn't consider the water it is swimming in, many organisations ignore their culture even though it is fundamental to survival and success.

Organisational culture is a powerful driver of behaviour. For example, cultures intolerant of failure or which do not intrinsically reward successful risk-taking can kill innovation and knowledge creation. Cultures that benefit individuals based on what they know create barriers to knowledge sharing, and cultures where managers are allowed to behave differently from the organisation's espoused values effectively disempower individuals from deciding and acting.

Increased understanding of organisational culture, using approaches such as narrative techniques (*see our website at www.anecdote.com.au for details*), social network analysis, open space technology and other participative approaches which help the organisation to become self-aware, is important in creating an environment that enables more value to be extracted from knowledge and information resources.

CHARACTERISTICS OF KNOWLEDGE

Effective stewardship of knowledge resources requires understanding of the nature and characteristics of knowledge.

Accountants understand absolutely the nature and characteristics of the financial resources they steward—resources such as cash, stocks and capital assets. The impacts of concepts such as interest, depreciation, opportunity cost, return on investment, cash flow and invoicing terms, are well defined and understood. Similarly, effective stewardship of knowledge resources requires understanding of the nature and characteristics of knowledge.

Knowledge traits are, however, generally ill defined or misunderstood. This lack of understanding often leads managers to apply inappropriate methods, thinking and tools to this resource. Such improper applications have serious implications for an organisation's ongoing success, and at the very least guarantee that its most valuable asset, the knowledge of its people, remains underutilised.

The characteristics of knowledge include:

- **You cannot command people's knowledge; you need to encourage them to share it.**
  Rather than try to compel someone to share what they know, an organisation should create an environment where sharing is valued and supported by appropriate behaviours. This characteristic has deep implications, as observed by Peter Drucker[3] in 1998: "In the knowledge economy everyone is a volunteer, but we have trained our managers to manage conscripts".
- **We always know more than we can tell, and we can always tell more than we can write.**[4]
  Hari Tsoukas has a good take on this: "The knowledge people use in organisations is so practical and deeply familiar to them that when people are asked to describe how they do what they do, they often find it hard to express it in words".[5] Going back even further, Polanyi observed that "the aim of a skilful performance is achieved by the observance of a set of rules which are not known as such by the person following them".[6] With these comments in mind, our take is that the notion of 'capturing knowledge' by converting it into written form (unstructured information) is important, but it has serious limitations. 'Capture' requires enormous effort; it can rapidly become obsolete; it can be taken out of context and its subsequent use is separated from the originator and could be misused. A single focus on capturing explicit knowledge is unsustainable. A story we heard years ago helps illustrate this point: A mining company had the world's foremost expert on photo interpretation to determine likely mineral deposits and he was about to retire. Recognising the importance of his knowledge, they sat an Artificial Intelligence analyst (they called these people 'knowledge engineers') with him for six months to document his knowledge so that an AI system could be built to replicate his abilities. The AI system wasn't worth a damn, but what they did discover is that the knowledge engineer was now the world's second best photo interpreter. It's why apprenticeship remains important in learning. The paper by Tsoukas is well worth reading and provides considerable ammunition to defend against the common desire to focus knowledge strategies upon 'capturing knowledge'.

Human knowledge is deeply contextual, it is triggered by circumstance and need, and is revealed in action.

- **We only know what we know when we need to know it.**
  Human knowledge is deeply contextual; it is triggered by circumstance and need, and is revealed in action. It can also be reconstructed using narrative techniques. As Dave Snowden points out, to ask someone what he or she knows is to ask a meaningless question in a meaningless context.[7] Tacit knowledge can only be displayed and manifested (not 'captured') in what we do, and that new knowledge comes about when "our skilled performance is punctuated in new ways through social interaction".[8]

Figure 1: Capturing Knowledge?

With considerable time and effort, a reader might be able to 'upload' about 30% of the information written down.

- **If knowledge is to be converted to information and vice versa, people must do virtually all the work.**

  Technology can help the 'capture' process, but most of the work still falls to people. With application of considerable effort, people can write about 30% of what they know about a subject. With considerable time and effort, a reader might be able to 'upload' about 30% of the information written down. Lots of effort has been expended to achieve a person to person transfer rate of 9%. A strategy of 'capturing everyone's knowledge and converting it into information' is doomed.[9] That is not to say that nothing should be 'captured', but the focus should be on identifying the high-value knowledge that has ready capacity for re-use, and capturing and maintaining it.

- **Knowledge is sticky[10], it does not flow easily across organisational boundaries.**

  Organisations have many internal barriers to knowledge sharing, many of them subtle and seemingly innocuous. These barriers include hierarchies, structural stovepipes and silos, physical barriers (including geography), and cultural and professional barriers. Understanding the existence of these barriers and their impacts is important in removing their limiting effects upon access to and use of knowledge resources.

- **Trust is an essential pre-requisite for effective knowledge sharing in organisations.**

  As observed by Karl-Eric Sveiby, "trust is the bandwidth of knowledge sharing". Our experience is that, as the level of trust in an organisation reduces, the level of process and control increases.

- **When solving problems, our natural tendency is to ask questions.**

  What do you tend to do when faced with a difficult problem: access the best-practice database and draw down the latest practice, or chat to a few trusted colleagues and ask their advice? If you are like us, you chat to people first, who then might point you to some relevant information in a database. In 2003, MIT researchers found the same: "People are five times more likely to ask a co-worker for information than consult the Intranet, portal or other enterprise subsystem". So why do we build KM solutions assuming that people first visit a database?

- **Efficiency encourages codification; effectiveness encourages lower levels of codification and greater flexibility.**

  The more you attempt to codify and capture knowledge as information, the more you reduce flexibility, the more you fossilise it. Also, as Max Boisot points out, "For many individuals, the loss of flexibility entailed by acts of codification also threatens a loss of personal power" —it effectively disempowers people.[11]

- **Sharing is a natural act.**

  People are born with an innate, lifelong desire and ability to share and learn, but sadly, organisations seem to conspire against themselves by creating many barriers to prevent this from happening. For example, fear and ambition with a dollop of distrust create the conditions for hoarding. Likewise, treating staff as conscripts, creating conditions of competition and applying unnecessary process are additional ways that organisations have managed to significantly impede effective knowledge sharing.

An understanding of these characteristics is essential in maximising the value of an organisation's knowledge and information resources.

An understanding of these characteristics is essential in maximising the value of an organisation's knowledge and information resources. However, this understanding does not provide a guarantee: it is a necessary first step, but by itself an insufficient condition for success.

CONCLUSION

The language we use to describe and understand something has a significant impact upon the way we act in relation to it. If we talk about knowledge as a thing stored in a database, we will build databases. If our language is about capturing knowledge, our strategy will focus on making things explicit.

We aren't arguing that nothing should be codified, just that codification on its own is an unsustainable solution. Some knowledge can be captured, owned and manipulated. Indeed, some knowledge should always be captured as information. However, some knowledge can never be codified; and some knowledge can be codified but shouldn't be—where the cost of codification and maintenance is not worth the effort, or where codification removes the ability to change and adapt.

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The objective of describing our take on how to talk about knowledge management is to help organisations talk about knowledge and information effectively. The emphasis is unashamedly upon the practical aspects of this developing discipline—a discipline that is often discussed in tortuously theoretical and unproductive detail.

Keep an ear out for the language that is used in your organisation. Is your organisation a 'machine' 'driven' for 'maximum performance' or is it a 'team' encouraged to be 'creative' and 'connected'? We think our take on the difference between knowledge and information can help you to build bridges between the various perspectives in your organisation (management, operations, IT, HR, sales, etc.) and to convert them from competitors into allies. You know you're on the right path when you hear someone senior in the organisation correct themselves: "...storing knowledge, oh I mean storing information".

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Mark, Shawn and Andrew are Directors of Anecdote, a company which helps organisations harness their tacit knowledge. In particular, we guide people in becoming better intuitive decision-makers, help to create the conditions for innovation, and provide new approaches for initiatives in culture change. We use narrative techniques, concepts from complexity science, and tools and techniques drawn from the wide discipline of knowledge management.

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