

POLICIES, STANDARDS AND FRAMEWORKS FOR MANAGING KNOWLEDGE — EXPLORING THE USE OF THE AUSTRALIAN STANDARD

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Introduction

This paper is part of an exploration of the role of overarching policy, standards and frameworks and models for enabling the management of knowledge in organisations. It reports an empirical study of how large Australian government agencies are using policy and standards in their pursuit of managing knowledge. The study focuses its enquiry on the role of the Australian Standard for KM within the situated complexity of organisational reality. It examines whether the Australian Standard and other encompassing frameworks or policies are in use and, if so, how they are applied within the organisation to support the knowledge endeavours of the enterprise.

Over recent decades there has been a fundamental shift from a society based on capital, land and labour to one whose primary resource is knowledge. Drucker (1993) claims that the current global shift to a knowledge society is one of the very significant changes or world transformations that have occurred in human society. To remain competitive, a modern organisation must attend to knowledge as a key competitive asset. Prusak (1999) notes that there is no sustainable advantage other than what a firm knows, how it can utilise what it knows and how fast it can learn something new. Hence knowledge management (KM) has emerged as an important focus for organisations over the last two decades and an increasingly important management lens or framework.

KM itself has seen various phases of development and maturity over the last two decades and scholars present many perspectives of what constitutes knowledge and its management. When knowledge is reified and deemed reducible to objects that are captured and stored in information systems, conventional approaches to management that include policy and standards development may be applicable. But when knowledge is considered as a human activity, a situated practice, a complex adaptive response or an interrelationship, predefined frameworks and processes may be less applicable. Bodhanya (2008, p. 3) calls for the crafting of a ‘deep and enduring organisational intervention’ as he acknowledges that alternative paradigms are needed to manage a social-process perspective of knowledge.

It is in this context that an Australian standard entitled: *Knowledge Management: A Guide* was developed and published by Standards Australia in 2005. Standards Australia is an independent company which prepares and publishes many Australian standards after a process of consultation and consensus that includes many of the varied stakeholders and experts in the field.

The knowledge management standard was heralded as the first nationally endorsed KM standard in the world (Halbwirth & Sbarcea 2005; Chatwin 2006). Standards bodies in other English-speaking countries, such as the European Committee for Standardization and the British Standards Institute, have so far published KM guides that make no claim to be standards. Indeed, some years ago, the British Standards Institute declared: ‘The judgement of BSI is that, at this point in the development of Knowledge Management, it is too early to attempt to impose too rigid a framework or too narrow

a view of this rapidly developing field.’ Its approach was to provide ‘globally applicable documents and other resources that acknowledge and build upon, rather than constrain the richness of the Knowledge Management discipline’ (Farmer 2002, p. 6).

A European study around the same time raised a similar point. In outlining aspects for and against the attempt to standardise KM, the authors listed objections that could be raised against the development of any standard, with the exception of one that speaks directly to the KM standardisation project: ‘one of the most critical points concerning standardisation is the question: “what is a sensible degree of standardisation of a soft subject like knowledge management in a detailed and structured, but still useful, manner?”’ (Weber et al., 2002). Weber and his colleagues refer to different levels of ‘standardisation’ instruments, such as ‘best practice, common approach, guideline, reference framework, or finally *a real standard*’ [italics added] and describes the then Australian KM framework (HB 275-2001; a precursor of the current Standard) as a ‘1st level standard’, which aims to describe the overall concept of KM’ (Weber et al., 2002).

It is fair to say that in 2005 Australia was ready for the guide. More than fifteen years since it was first an issue in the Australian literature, KM continues to attract considerable interest here and overseas, including a large and still growing literature, expensive business conferences — focusing increasingly on specific aspects of KM — and a significant number of universities offering KM courses (Ferguson & Hider, 2006).

Australia may be ready for the Standard but the question posed here is whether Australian organisations are likely to benefit from its publication. Its intentions, we are told, is to assist individuals and organisations understand KM concepts and ‘the environment best suited for enabling knowledge activities’, and to ‘[o]ffer a scalable and flexible framework for designing, planning, implementing and assessing knowledge interventions that respond to an organisation’s environment and state of readiness’ (Standards Australia 2005, p. ii). This is an ambitious project. The current research sets out to establish whether the Standard lives up to the promise.

The Australian Standard

Before making any comment on the relevance and utility of the KM Standard to Australian organisations, however, it is worth establishing its broad outlines. The Standard is a long, complex attempt to codify an area of theory and practice that is noted for its very complexity, multi-disciplinarity and contentiousness.

There have been many attempts to define KM — indeed, one review by Hlupik et al. in 2002 identified eighteen distinct definitions of KM (Bouthillier & Shearer 2002). For the authors of the Standard, KM is:

A trans-disciplinary approach to improving organisational outcomes and learning, through maximising the use of knowledge. It involves the design, implementation and review of social and technological activities and processes to improve the creating, sharing, and applying or using of knowledge.

Knowledge management is concerned with innovation and sharing behaviours, managing complexity and ambiguity through knowledge networks and connections, exploring smart processes, and deploying people-centric technologies (Standards Australia 2005, p. 2).

The keywords in this definition are ‘social’ and ‘technological’. Systems and technology are seen to play a major role in KM initiatives but what is especially noteworthy is the recognition of the social sources of information and knowledge in organisations and their role in knowledge generation.

A glance at the long list of KM ‘enablers’ in the Standard — thirty-four in all — may help to put some flesh and bones on the definition and to highlight the trans-disciplinary approach represented by KM. Enablers are the ‘tools, techniques and activities’ used to implement KM initiatives or, as they are termed in the Standard, ‘knowledge interventions’. More than half of them are management

related, most focusing on human resources, which is hardly surprising, given KM's primary endeavours: leveraging the organisation's intellectual assets, fostering innovation and change throughout the organisation and developing the required organisational culture (Ferguson & Hider 2006). Some represent standard management theory and practice, such as after action reviews (AARs), business process mapping and redesign, and mentoring and coaching, while others relate to the ways in which people communicate with each other in organisations or ways in which they can be encouraged to communicate: for instance, communities of practice, social network analysis and storytelling.

Most of the remaining enablers are split between Information Management and Information Systems and Technology. Here Information Management signifies *information*-related tools, techniques and activities, as distinct from technologies: for instance, content management, document management and environmental scanning. Finally, there is a group of enablers that appear to belong to the emerging (or emergent) field of KM: knowledge auditing, knowledge mapping and knowledge literacy, although they clearly have corresponding activities in the information management domain.

The section on the development of 'knowledge interventions', which precedes the list of enablers, is seen by the authors of the Standard as its 'key feature' (Standards Australia 2005, p. 7). This outlines a framework for developing knowledge initiatives and implementing KM. The framework presented is a cyclical one that bears some resemblance to traditional Systems Analysis and Design. It comprises three main phases, called Mapping, Building and (another inelegant term) 'Operationalising', each of which can be supported by appropriate 'enablers' and each of which can be revisited 'according to the demands and needs of [one's] organisation' (Standards Australia, 2005, p. 11).

This developmental model is underpinned by the authors' concept of a '*knowledge ecosystem*'. Here the senior and middle managers consulted by the Committee prior to the Standard's release and unfamiliar with the jargon may have been at a loss. If the Map/Build/Operationalise cycle is the key feature of the Standard, the knowledge ecosystem model could be regarded as the key to the cycle, since it provides the organisation with insight into the 'knowledge flows' within the networks, pathways and relationships of the model (Standards Australia, 2005, p. 5). The reader is asked to consider the organisation 'as an ecosystem that consists of a complex set of interactions between people, process, technology and content' (Standards Australia, 2005, p. 8).

The knowledge ecosystem is made up of the four elements just mentioned; the enablers; 'Organisational Outcomes', which are at the core of the ecosystem; 'Context and Strategic Intent', which also lie at the core of the knowledge ecosystem (since knowledge is shaped by these factors); 'Culture', which refers here to 'the combination of an organisation's skills and competencies'; and 'Drivers', such as competitive pressures, customer service and legislative requirements (Standards Australia, 2005, p. 15). Two of the enablers, 'Networks and Communities' and 'Champions and advocates', are also listed separately as components of the knowledge ecosystem.

To return to the developmental model, the Mapping phase of the knowledge intervention cycle is geared to establishing an understanding of organisational context and strategic intent; 'assessing the existing knowledge environment'; outlining where the organisation needs to be, including 'the desired future state of the knowledge ecosystem'; and assessing the 'gap between the existing and desired state of the knowledge ecosystem'. The Building phase focuses on ways in which the gaps identified in the Mapping phase can be addressed and how to begin introducing knowledge interventions, typically through the development of prototypes or pilot studies. At the Operationalise phase, the emphasis is on 'what works' and the moving of knowledge interventions that have been piloted or tested 'to a level where they are sustainable on a day-to-day basis and capable of being scaled across the ecosystem' (Standards Australia, 2005, p. 29).

The Mapping-Building-Operationalising framework is not particularly helpful in itself. One of its strengths, however, is that, as well as providing managers with a workable set of guidelines within which to develop knowledge initiatives, it contextualises the process by providing, for instance, examples to assist organisations get started and appropriate enablers for different phases of the cycle. This feature helps to provide some practical advice and give some substance to what would otherwise be an abstract account of a model of organisational complexity (the knowledge ecosystem) and a generalised process of knowledge intervention.

Examining the KM Standard in practice: case studies

As already noted, there are many scholars who would debate an organisation's ability to manage knowledge (Stacey 2001, Snowden 2002) at all. Knowledge is not seen as object or artefact but a continual flow and an active process of relating. In the light of their positions, it is relevant to ask if KM can be standardised at a national level.

Since there *is* an Australian KM Standard, this research project begins an exploration of its use in large knowledge intensive organisations. As the initial phase of an ongoing research project to examine the possible use of KM standards in modern knowledge based organisations, the researchers interviewed key managers in large government organisations to establish whether the Australian KM standard is in use and, if so, how it is applied within the organisation and whether it is of any benefit to the knowledge endeavours of the enterprise. The project is seen as a preliminary study, with potential to provide rich data for the development of a much more large-scale piece of research.

One interesting finding was that only two of the interviewees in the organisations reported here had actually heard of the Australian KM Standard. Both have connections within the library sector, which was interested in and consulted about the development of the Standard (Chatwin, 2006). A significant number of interviewees, however, all working in the field of information management, were unaware of the Standard's existence.

Only one interviewee reported making direct use of the Standard and that was in the case of a particular project. This interviewee, however, also sees political value in the Standard, which adds credibility to knowledge interventions:

I think it is productive for teaching people what we're talking about. And in fact, for those who are really process oriented, to think there's a guide, its like, 'Oh there's somebody telling us what to do' ... And that actually helps me that it's come from Australian Standards. 'Oh, look at this'. And they will actually take notice of that ... you have an authoritative organisation putting out a guide and they go, 'Oh, yes in that case it's got credibility'. And that's really what I would be using it for ...

The same interviewee also makes use of the Standard's definitions — not the Standard's definition of KM; 'but some of the glossary that's in it is really handy and we've added bits of that to documents we've put together.' Again, being able to say that these came out of the Standard has political value, especially in the government sector 'because they're used to working to some sort of regulatory environment'.

Another interviewee referred to the organisation's pragmatic approach:

... it's not necessarily recognising particulars in the first instance, but ... an approach that's focused on looking for the better practice and learning lessons from other organisations, applying what seems to be the most appropriate elements of that, and setting that within a context of well what's the legislative framework that we have to consider in this space?

Specific non-KM standards were mentioned, especially IT-related standards and frameworks: for instance, the *Australian Government Architecture Reference Models* (2007) and Standards Australia's *Corporate Governance of Information and Communication Technologies* (2001). The

framework for knowledge interventions outlined in the KM Standard is unlikely to have application, given the use of methodologies such as Prince 2, ‘a process-based method for effective project management’ (PRINCE2.com), which is used in at least one of the organisations studied.

Given Standards Australia’s decision to call its guide a standard (implying rigour), it was interesting to note that one of the interviewees indicated that it was the Standard’s very flexibility that made it useful: ‘I liked the organic model ... That appealed to me. If it had have been some of these really rigid things I wouldn’t have been able to follow it, I don’t think.’ Asked whether an organisation that acknowledged the need to manage knowledge might have a guiding framework or a policy or a set of processes to guide it, the same interviewee commented: ‘In fact the Australian Standard’s not that bad for that sort of thing because at least it gives them a *framework* to think about. I’d use that but I’d be also reading, what else is out there’ [*italics added*].

The whole issue of standardising management of something as intangible as knowledge is summed up in the following comment:

I tend not to say knowledge management very much at all ... and managing knowledge. You don’t manage what’s between people’s ears, be realistic. You know, it’s just not going to happen ... and it’s quite interesting that they tend to get it mixed up with information management because that, you can tick the boxes on ... it’s just like, ‘No, stop now. You can build the most beautiful databases, the whole bit, but if nobody’s going to use them what is the point?’ Because you’re looking for behaviour change.

Although the KM Standard does not inform the approach taken by all interviewees, several references were made to ‘philosophies’ and to leading thinkers and consultancies in KM and related fields: for instance, Dave Snowden (Cynefin Framework) and Straits Knowledge (Patrick Lambe).

Some conversation focussed on information management, as distinct from KM, but in all cases there were references to tools, techniques and approaches that corresponded to the KM Standard’s ‘enablers’. These included:

Enablers	Tool/technique/activity
After action reviews	Discussion about compiling lessons learned from projects.
Change management	Focus on change management in roll-out of systems and tools.
Communities of practice	Community of practice for project managers.
Document management	Document management system that forces users to save most information in the corporate area.
Knowledge mapping	Information mapping exercise that looks at all the information repositories in the organisation and links to policy etc.
Leadership in the development of a knowledge- or information-sharing environment	Drive from the CIO to integrate and consolidate information systems/resources.
Learning and development	Focus on and budgeting for training.
Leveraging information repositories	series of databases around decision support tools, events databases; professional associations, knowledge brokering service and then we built this thing called the evidence based software
Meetings and ‘share fairs’	Focus groups; ‘In the Know’ sessions
Networks and communities	Customer forums
Storytelling	Anecdote circles
Strategic conversations	Enterprise architecture framework and conversations between IM and business units
Technological integration	Focus on integrative technologies and strategies
Technologies for communication and knowledge sharing	Enterprise search; alert services

One of the recurrent themes was the importance of leadership in the development of a knowledge- or information-sharing environment: for instance,

... our group manager has a strong client focus, so before we started these more general customer forums, where people from a whole variety of levels in the organisation can attend, he was already engaging with his peers across the organisation, so he regularly, every couple of months, meets with other ... the group managers on a one-to-one basis, and says, 'From your perspective, what are the issues that your group are facing?' and that has a similar kind of process about documentation following up and sharing the lessons learnt from that, dealing with the issues.

Without the leaders you just don't get there. You can do it all under the radar ... but the point is ... it is vision and leadership. Without it you're not going anywhere.

The other strong theme to emerge was the concern about addressing 'silos' in organisations. There was reference to 'silos of information' being a major challenge for one organisation: 'we have lots of silos of information — data, documents, emails, library. So it's about how, when you're looking for information, if you don't know what you don't know, how do you actually find that information?'

More typical are the references to organisational silos, which act as substantial barriers to the sharing of knowledge and information across the organisation. Comments included 'how do we foster really good relationships between knowledge providers and regional bodies and the regional bodies right across Australia themselves ...?' and 'the areas where we're trying to move in with things like information management, we're at the moment still having to go to multiple governance committees, for example, to try and get sign off, to get agreement across the organisation about how to take an approach.'

It was clear that some of the strategies, techniques and technologies discussed had addressed the issue of silos. One interviewee, for instance, mentioned anecdote circles:

Anyway, one of the anecdotes in the anecdote circle that came out was, this person had had this terrible time doing this piece of research and they'd spent weeks on it and the whole bit, to have the person at the other end of the table go, 'I did that about six months ago and it's on our shared drive', because they didn't check and it was then they realised, this isn't a little problem, this is a really big problem. We do not have the staff to do this sort of duplication of effort but — really powerful anecdotes.

The issue of silos was highlighted in one set of interviews, during which it was suggested that government departments face special problems because of the culture of 'constant change'. It was argued that the silo mentality is encouraged insofar as 'siloed' groups may be moved to different departments and split away from the groups with which they are only temporarily associated.

And I think the way the organisation becomes, because like every election, we'll either lose an area of responsibility or gain an area of responsibility, so there's lots of comings and goings in this department, which makes it really hard, because like yeah, you think you're getting somewhere, and then the world changes, and you have to start again ... I think all government departments have that culture of constant change ... And the maturity of an organisation and some of the knowledge issues are about maturity and having sustainable flows of information and being able to grow in a fairly stable environment and in government agencies, that's very rare ... if you look at an agency like Customs, in comparison to us where they've had a central remit ... you have this consistency, whereas the changes [we go] through encourage areas to actually maintain their siloed attitude so that they're self sufficient when they get picked up and moved somewhere else ... It's almost a survival mechanism to have that siloed — and knowledge that you've collected and not shared deliberately ... It's quite clear that areas that have been integrated for longer periods are less concerned about that, and more willing to share and to take a collegiate view, and the areas that consider they have to be more self reliant because they get moved around more often, exhibit those type of behaviours.

This certainly links into the long-standing perception among information professionals in the financial sector that mergers and demergers in the sector present them with critical challenges. More important, it also conflicts with the neat, if complex, model of the ‘knowledge ecosystem’ presented by the Australian KM Standard, suggesting that, in the government sector at least, there may be knowledge micro-ecosystems — or should that be subsystems?

There is also a sense in which the inevitable changes in many government departments might militate against the strategic approach noted by interviewees: for instance, this comment:

The other aspect of the issue that we’re trying to get to, though, which is much more important, is about what are we going to have to answer in three years’ time. So what investment do we put in place now to ensure that we’re not constantly trying to catch up with what the business needs, but instead can anticipate and almost do a leap, so that in three years’ time when they suddenly go oh, well these are the questions we need to answer now, we’ve already got a platform in place, we’re already doing the appropriate data collection, and we’ve already got the appropriate systems to control all of that there, so that business don’t throw their hands up in the air once again and go, oh this is all too hard, and we’re in the same place we were three years ago.

In other words, the interviewees see the value of being strategic and planning ahead but the ‘culture of constant change’, noted above, may act as a barrier to strategic planning, in that there may be little point in anticipating the information needs of business units, say, three years in advance if there is a good chance that in three years time those same business units could well have disappeared into another area of government.

Not surprisingly, there were a few references to change management, in this case putting the emphasis on the need for those leading the development of systems and technologies to engage with people; the clients in the business units, for instance:

... we’ve learnt from the previous implementation of the document management system, and learnt the hard way, and I think that the deployment of our new document management system has been quite successful because we’ve done it in a staged approach, because we’ve used change management and training, and listened to the users, and when we’ve communicated, we’ve said, ‘You wanted this so we’ve given you this’ type stuff ...

The gap between those working in information or knowledge management units and people in the business units was another recurrent theme. It is not a new one, having prompted the development of information management as a discipline and as a university-level course back in the 1980s (Ferguson, 1996). The strategic conversations mentioned earlier were seen as one way of closing this gap: ‘And I think that the gap between business and IT is quite evident, well, not just this department, any organisation, and I think that’s one way that you can actually start closing that gap, by having those conversations.’ Another interviewee saw training as a means to close the gap:

You’d go out to run training ... so we got a budget because we’d say, ‘Right, we’re training people to use our information products’. Because if we told the department we were going out and gathering business intelligence, you can imagine, you would not have a budget, yes ... But what we were really doing was not just training them but the trainer would go out and sit with the client at their desktop and work through a real problem of; how did they find the information they needed to do their job? And in the training process we’d gather information about; what were the key topics that they were all dealing with, what sort of issues were they dealing with, what sort of problems with gathering the information they needed? And all that would come back ... all the trainers would come back in every fortnight and talk about the issues in a meeting. The things they’d learned while they were out. And that would spark a whole new conversation ... So we’d pattern match all the issues across Australia for our clients in the different agencies and then say, ‘Okay, how are we going to address this as a service issue, how do we redesign our services to meet that need where things are going wrong?’ So, the knowledge sharing that was going on all the time really made a difference then to services and that’s the model we were using.

Conclusion

There are indications that the Australian KM Standard may not be widely utilised in government departments, other than as a framework to which information and knowledge managers can refer for definitional or political help. What is apparent, however, is that, while they make little direct use of the Standard in their practice, they are guided by the same body of thought drawn on by the authors of the Australian Standard. The interviews demonstrated some pragmatic ways in which practitioners address knowledge-related problems in their organisations and develop solutions that owe much to the KM literature and to their understanding of knowledge and information practice in similar organisations. There are also interesting indications that some widely cherished KM beliefs, notably the value of knowledge sharing, may wither in the realities of organisational politics, not least the fact that organisational change — in the public sector at least — can reinforce the very knowledge hoarding that proponents of KM seek to eliminate.

Finally, if the impact of frameworks such as the KM Standard is to be evaluated then the study could be widened to include the gathering of quantitative data. The rich data gathered in this phase may form the basis for the development of a much more large-scale piece of research into the contribution of KM to Australian industry, government and the economy. It might also be instructive to conduct a comparative study of public and private sectors, particularly if the survey of the private sector were to compare knowledge-intensive areas such as financial institutions, law firms and the media with the similarly knowledge-intensive government sector.

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